MEETING

STATE OF CALIFORNIA

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

GREEN RIBBON SCIENCE PANEL

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SACRAMENTO, CALIFORNIA

FRIDAY, SEPTEMBER 14, 2018

8:33 A.M.

APPEARANCES

PANEL MEMBERS PRESENT

Arthur Fong, Ph.D., Co-Chair

Kelly D. Moran, Ph.D., Co-Chair

Elaine Cohen Hubal, Ph.D. (via webinar)

Mark Nicas, Ph.D.

Ann Blake, Ph.D.

Jack Linard, Ph.D.

Timothy Malloy, Ph.D.

Michael Caringello, MBA

Kenneth Geiser, Ph.D.

Helen Holder

Megan R. Schwarzman

Rebecca Sutton, Ph.D.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC)

Veronica Villasenor, Public Participation Program

Meredith Williams, Ph.D., SPWP Deputy Director

Karl Palmer, Branch Chief

Heather Lee

PRESENTERS

Gina Solomon, Public Health Institute, and
University of California, San Francisco

I n d e x

P R O C E E D I N G S

8:33 A.M.

MS. VILLASENOR: Welcome to the Green Ribbon Science Panel meeting. My name is Veronica Villasenor and I work at DTSC's Public Participation Program. And on behalf of the Department, I'd like to thank you all for taking the time to be here today.

Let me take a moment to announce that in addition to those of us here in the room today, the public is also following today's meeting via webcast. This is a repeat from yesterday's meeting's announcement. If you're tuning in to the discussion via webcast and you'd like to provide input, please email your questions and comments to SaferConsumerProducts@dtsc.ca.gov. Today's meeting is also being recorded, and transcripts will be posted to DTSC's public website once they are made available to the Department.

Before we get underway today, I have a couple of brief announcements.

Please take a look around now to locate the two exits close to you in the event that we need to evacuate the room. If we need to evacuate, which we all hope it's not the case, please take your valuables with you. Our staff will work to guide you to the nearest exit. And I'd also like to point out exit signs on the ceiling, which will help guide you out if you need to leave quickly. Once you exit

the room, please do not use the elevators. Instead, please exit down the stairways. If the stairways are unusable for any reason, we'll be directed to a protective vestibule inside the stairwell to get out safely. If we need to leave the building entirely, please head towards the relocation site across the street at Cesar Chavez Park.

The restrooms and water fountains, they're located to -- the nearest restrooms are located in the hallway outside the meeting room. The women's restroom is located at the west end of the hallway. The men's restroom is located at the east end of the hallway. If you need a quick drink of water, the nearest fountains are located next to the women's restroom.

We will be providing an opportunity for public comment later this morning. We ask that anyone who is interested in providing public comments, to please hand in your Public Comment card. For those tuning in remotely, you may email your comments to SaferConsumerProducts@dtsc.ca.gov and it will be read aloud.

Finally, I want to announce to all attendees that today's Green Ribbon Science Panel Meeting is subject to the Bagley-Keene Open Meeting Act to preserve the public transparency of the Panel's discussion and decisions.

Thank you very much.

PANEL CO-CHAIR FONG: Thank you very much,

Veronica.

Today, we'll start the meeting by taking public comments on today's agenda items. We'll then hear a presentation from Dr. Gina Solomon of the Public Health Institute and the University of California at San Francisco on preliminary findings from a green chemistry law policy evaluation that she led, after which the Panel will be given the opportunity to ask Dr. Solomon clarifying question. We'll then have a discussion on the evaluation and recommendations. And we'll end the day be hearing about SCE's recently-developed preliminary analysis template, after which we will have a discussion and then close out the meeting.

So let's start out with hearing from Meredith.

DEPUTY DIRECTOR WILLIAMS: Good morning everyone, and welcome. And I don't have too much to say, other than yesterday, I think, lived up to its billing in terms of the level of interest and engagement and the contributions from the Panel. We certainly, as typical, but even more so yesterday, got a lot of good feedback and food for thought that we will be following up on. And I'm quite confident that once Dr. Solomon makes her presentation, we'll have even more food for thought and more actions that we will want to consider.

So I really want to just get on with it because

I'm very much looking forward to that discussion. So I'm going to turn it over so we can do the public comment.

MS. VILLASENOR: Before today's panel discussion, we will take public comments. If there are webinar participants who wish to comment at today's meeting, please email your comments at SaferConsumerProducts@dtsc.ca.gov and it will be read aloud. Comments submitted remotely, we will -- will be read to the Panel after we hear from commenters from in the room.

The public is reminded that today's comments are directed at the Green Ribbon Science Panel on the agenda's topics, that is the materials that were presented to the Panel. Public comments directed to DTSC are not appropriate at this meeting. Please note that the Panel is not able to respond to comments or to answer any questions as this meeting is a working meeting.

If you have not signed up to comment, you may do so at this time. Staff have commenter cards for you to indicate that you wish to comment.

Okay, no comments from the webinar. Okay, we don't have any comments.

So now we're going to go to our Green Ribbon Science Panel Member, Elaine Cohen Hubal, who is online.

PANEL MEMBER COHEN HUBAL: Hi. Thank you. Please let me know if you have trouble hearing and if this gets too

tricky, and then I'll finish writing my comments. I really thank you for this opportunity and I'm very disappointed not to be there in person.

So yesterday, I submitted one comment, and I'll just really quickly highlight that again, just because it's so difficult to have these comments read. But this was in reference to the AA example. There was a question on how to use the results of that to sort of guide future pilots and research, and I thought that was an exciting analysis. And I thought it was really important and look forward to put the lens on this AA, the alternatives assessment, to see what that kind of assessment would look like and how it would inform at the very early stages of chemical design and development.

We heard a little bit yesterday from some of the product manufacturers, which I thought was very enlightening. But what are the SCP elements that are informative at this stage in the process? And do the alternatives assessments at this stage really inform how an alternatives assessment for SCP priority product chemical could be done?

So just, you know, can we think about these alternatives assessments, not just for what's newly-mature products and chemicals, but how those same tools will be informative early on in the process. So I think it's been

really exciting, the way the Safer Consumer Products Initiative has advanced thinking on how we develop chemicals and products. And I would just like to see that overlaid in how we're thinking about alternatives assessments at all stages of chemical and product development.

And then the other thing is, sort of on the flip side, can you -- can we engage stakeholders to really develop retrospective case studies that demonstrate how the price of alternatives assessments that meet these, you know, kind of novel SCP regulations would have led to the same or different decision? And so how can these case studies really help us understand how to move forward in advancing the alternatives assessment practice?

So that was yesterday's.

And then I just have, also, a couple comments, also from yesterday's discussions. And one was on -- following up on carpet and PFAS as the DTSC proposal, and was the Safer Consumer Products effective in communicating the need for a class approach. And I would just like to throw my hat in on a side that says, yes, indeed, that they did -- SCP has identified a really important example that will support the goals of the regulation and facilitate informed substitution. In the first paragraph of the first section for the priority production chemical profiles, SCP did identify that, that PFAS are all candidate chemicals due

to their designation as priority chemicals under the California Biomonitoring Plan, the ECBP.

But, importantly, what is done in that profile is it's really -- is that they focus on here are the PFAS chemicals that are used for carpet surface treatments and surface treatments, here's the raw materials in those, the PFAS use in the raw materials for those surface treatment products, and here are the associated environmental degradants that we know about along the chemical product lifecycle for those surface treatments; right? So -- and there are many. And any alternatives assessment under SCP for this priority product chemical would need to address the feedstock, contaminants, degradants of any proposed alternative.

So just from a science perspective, it's really hard to figure out how you could do this in any way other than just taking this kind of chemical class approach. So whether or not all 3,000-plus PFAS end up meeting -- you know, they're not going to be all specifically addressed in any alternatives assessment. It would be hard to imagine how you could do this without taking a class approach.

So I just wanted to note that I think that that was laid out nicely in the document.

And just one other thought on carpet and PFAS proposal, and this is nothing that you all do not know, but

public concern around these chemicals, these PFAS-class chemicals, is really providing a very important driver to build capacity to anticipate potential impacts of alternatives. EPA and many other in academia, in the state are actively in the process of collating and generating information on the properties of these PFAS compounds, the transformations, the bioactivity, the current environmental media, and biomonitoring is also underway of what we know to be highly exposed populations.

In conjunction with that, EPA and others are also developing both targeted and, importantly, non-targeted methods for measuring the increasing numbers that we know about of PFAS in water, air, dust, products. And so in many ways for nearly all the stakeholders, this is a ripe time for innovating and proactively implementing alternatives to PFAS class.

So I would just, you know, kind of urge you to think about this, which I know is hard because you're a regulated entity. But this is potentially an alternative to really control what happens next, rather than have it sort of just happen.

So it's hard to breathe when I talk this fast.

I just applaud on decision making. I really thought the guest speaker was fascinating. I think for all of us to hear what it sounds like to be inside one of these

more younger, innovative kinds of business models is really great. He noted the use of visualization, such as spider webs, they thought.

And I did want to just throw out a pitch for the fact that there are -- I'm also seeing in many of the really -- a collection of materials that were sent out for this meeting were just incredibly enlightening, but there's also places there in the decision making refineries that were sent where the need for ways to look across disparate kinds of information, whether it be across the hazard endpoints or across the different elements that are important for making these decisions, how do you do that?

And there is -- there are many examples that I think we could and should start applying, just to see how they work. But one that I wanted to highlight is the high toxicological prioritization index, and that's analytical brainwork that enables integration of multiple forces information. And it's the type of tool that could maybe be used to support transparent, importantly, transparent documentation of this SCP element and stakeholders' decision criteria.

There is new top (indiscernible) user interface that I see has just come out, so that's there for your reference.

Then just one more quick thing, if you'll indulge

me, just on a little, I don't know if soapboxing is a verb, but I'm going to just kind of add on to a lot of conversation yesterday.

The SCP initiative and DTSC leadership have really been, and this Committee to which I'm one of the Board Members, has really been a transformative force, in my opinion, for advancing chemical policy and management. And I just, you know, I do want to really applaud the patience and persistence, the multi-stakeholder, multi-disciplinary dialogue. And I really encourage that these dialogues continue. So there's my soapbox.

However, the best science is moving very, very quickly. And then as you -- you know, as we all heard yesterday from the representatives from the consumer products manufacturer, there are a range of stakeholders, regulators, chemicals, consumer product manufacturers, retailers, who are also moving quickly. They're moving quickly to use the new information and make decisions on the information, generate information. I'm also involved on a science panel for another jurisdiction that manages chemicals, and they're moving very quickly.

So I think what I want to say is that rapidly -- and that these groups, these stakeholders are rapidly developing, using new data streams in new ways to make decisions. And I would just really urge -- well, I feel a

real sense of urgency. And I would just hope that moving forward, you know, we as a community can really demonstrate some agility in thinking and in practice so that this initiative can really continue to lead, so that the goal of moving forward to make better decisions is, you know, one that we're moving on consistently and quickly, you know? Because that conversation about the perfect versus the better is, you know, I think something that we should all take to heart.

So thank you very much. I'm really looking forward to today's conversations. I'm hoping maybe you could mute me on the phone, because I have no power and can't see the webinar.

Thank you.

MS. VILLASENOR: Great. Thank you so much for your comment.

Are there -- is there -- there doesn't seem to be any more comments. We will close the public comment period for today.

PANEL CO-CHAIR MORAN: Thank you very much. And I really want to thank Elaine. The hurricane is bearing down on her home and on all the folks in the Carolinas, and are thoughts are with everyone there, including Elaine. I really wish that she were here and a part of this discussion because she's contributed an awful lot in her short tenure.

And I'm looking forward to having her be a part of our discussion at our next meeting. So I appreciate everyone's forbearance in listening to all of her stuff combined into that small time because that's all we're allowed to do under the law.

So now it's time to move on. And I'm just incredibly excited to introduce Dr. Gina Solomon of the Public Health Institute. And I just want to -- there was an inadvertent error in the materials, but Gina is here in her role as the Principal Investigator at the Public Health Institute to present a study to us. And as Julie mentioned before she left yesterday, it is one of the great things that can happen with a good program, is to have a review of it after its been around for a little while. It's a hard thing to do in a lot of different ways, but it's actually really, really important for periodic reviews of, particularly, science-based regulatory programs.

Before Gina starts, I'll just note that she's a medical doctor. And in addition to her role as Principal Investigator at the Public Health Institute in Oakland, she's a Clinical Professor of Medicine in the Division of Occupational and Environmental Medicine at UCSF. From 2012 to 2017, she was appointed by Governor Brown as the Deputy Secretary for Science and Health at the California EPA. She also served as the Director of Occupational and

Environmental Medicine Residency Program at UCSF from 2008 to 2012. She was the Associate Director of UCSF Pediatric Environmental Health Specialty Unit from 2003 to 2009. And she also worked as a Senior Scientist at NRDC from 1996 through 2012.

She's on a whole array of really important national roles at the NAS, EPA, and elsewhere. And she's really uniquely positioned in the chemicals policy arena with her background and science experience at the edge of science and public policy. So it's an incredible opportunity for this program and the state to have Gina taking the lead on this review.

So I'll turn it over to Gina.

DR. SOLOMON: Thanks. And I guess for the webinar, I should probably stand up here, even though it feels kind of removed from the Panel.

DEPUTY DIRECTOR WILLIAMS: And you could sit, once we get into discussion. Maybe that --

DR. SOLOMON: Yeah. That sounds --

DEPUTY DIRECTOR WILLIAMS: -- would be more comfortable.

DR. SOLOMON: -- great.

So I'm so happy to be here, and it's an honor to have a chance to get the thoughts of the people in this room because I have spoken with some of you individually, but I

never -- I haven't spoken with many of you about this project. And I'm at a stage right now where I have preliminary findings. I'm putting those together into recommendations, and it's a great opportunity to basically hone and refine where this project and final report is going.

And I am so sorry I wasn't able to be here yesterday. I would have liked to have been, but the confluence of the Global Climate Summit and this and a number of other things, the Western Occupational Medicine Association meeting and a few things, have made it a kind of crazy week, but I'm happy to be here today, even though I'm missing Al Gore, but, well, you know.

So this project is funded by the California Breast Cancer Research Program. They have a special initiative around policy projects in which they're funding a number of relatively short-term policy-focused projects that they think may be relevant, either directly or indirectly, to breast cancer or chemicals that may cause breast cancer, so that's where this came from. And it's being run by the Public Health Institute, which is a nonprofit entity based in Oakland with a global reach that manages a research budget of about $110 million a year, so on all kinds of different public health issues. I'm relatively new there, but it's quite an amazing place.

And the purpose of this project, really, is to think about, you know, we're really ten years out. One of the interviewees of this project said, "Oh, my gosh, ten years. How could it be ten years? How did that happen?"

And so we are ten years out from the passage of the legislation that created the program. And, you know, it's a reasonable time to look at whether there are any policy enhancements that could strengthen the program and assist in the implementation going forward.

And we convened, I hope you can see the names here, but an Advisory Group with a little bit of overlap with this panel, thanks, Meg, and a number of great folks, either in the breast cancer world or in the policy world, most with government and NGO background. And the project was a qualitative research project, which was new to me. Fortunately, I had, as one of my co-investigators, Anh Hoang, who is a medical student at UCSF, also has a strong background in qualitative research. So it was great to be able to learn from one of my medical students, and I did learn a lot.

We did a purposeful sampling approach in which we compiled a spreadsheet of experts for potential interview, then narrowed the list according to a set of predefined criteria. And then conducted interviews that were tape-recorded, professionally transcribed, and then coded in a

software system called Dedoose, which allows you to excerpt relevant -- excerpt and organize relevant sections.

And as you can see, we sort of divided people up a little bit by perspective. And so I'll often have, next to quotes, a little bracket, just kind of with, you know, some kind of a perspective as to how the person defined themselves, some cases by their affiliation, NGO, government, et cetera, or by their expertise as a scientist of attorney. We had some folks from outside California, but it was skewed to California folks for obvious reasons.

And so let's get right into the meat of what the interviews found. Wait, actually, sorry, just to go back.

A couple other elements to this, obviously, a literature review was a necessary piece of the project. And then there's another component that relates to a list of chemicals that are, you know, potentially associated with breast cancer, and looking at how those do or don't appear in the chemicals associated with this program. And I'm not going to be talking about those latter pieces so much today. I'm really focusing on the expert interviews because I think that the most exciting and interesting findings came out of those.

So one of the open-ended questions in the interviews was what do you see as the strengths of the Safer Consumer Products Program, in particular? And as you can

see, by far the -- you know, three-quarters of the interviewees immediately went to the concept of unique innovative, saying, you know, I think that California is trying to do things that nobody's done before. That was a fairly typical-type comment in that vein.

There was also this idea of, you know, California just being such an important model. And I think Elaine also mentioned that just now in her comments. So that, I heard over and over again from all different perspectives. It really didn't matter who the interviewee was. They tended to -- you know, most came to that.

But there were a lot of other issues that came up. And some of them were sort of interesting in that, for example, alternatives assessment was mentioned quite a bit, but not by any of the folks from business, as a strength. And the chemical list also was mentioned a fair amount, but again, by the other kind of perspectives and not so much from business folks. And then on the flip side, regulatory flexibility was mentioned just by government and business experts. And so you sort of saw a little bit of difference from across the different perspectives. But they're -- I'm going to actually be touching more on most of these issues.

And quite a few people specifically talked about the indirect effects of the very existence of the program, the list, the process and pointed out that kind of behind

the curtain, some people said, or, you know, behind the scene, that there are reformulations that have already been occurring. And I've heard that again, also from people from within the business community, as well as folks from outside the business community, sort of predicting, or from their knowledge of what's going on out there.

Okay, but let's get to some of the challenges, because that's really where we might have some areas to delve more deeply into today. And the challenges that came up, I ended up coding those according to data excerpts, rather than according to interviewees, so you'll see a different scale on the X axis. That's because pretty much everybody talked about pretty much everything, so it would have been a boring bar graph. And also because I asked some specific questions about a number of these areas, and so that kind of skewed the way the data would look. But by looking at the number of excerpts, it really got into like how much did people really dig into these different areas?

And as you can see, there were really two that sort of are the highest, what we coded as slowness, which really is the pace of the program, and data gaps, with 100 excerpts and 99 excerpts respectively in each of those areas. So quite a lot of meat to digest. Alternatives analysis came in just behind a number of other issues.

And again, here you see that they're really all of

the different perspectives, spoke, you know, on all of these different issues. But there was a real split and that really -- the split was on the pace of the program where almost universally, the folks from more of NGO of academic perspectives made comments that were really expressing deep concern about what they saw as the slow pace of the program, very impatient, very concerned about it.

On the other side, the folks from business universally, actually, said that they didn't feel that the program was moving too slowly, or even if it was moving slowly, that it was appropriate because there's, you know, a need to move deliberatively, and then perhaps over the time the program would speed up naturally. So there was that big split.

The government folks, actually, were split. There were some in each of these two camps.

And so I guess, you know, the main takeaway, I think, from this is that there's a lot of impatience from the NGO organizations right now that we all need to be aware of because there's some -- they are trying to figure out how to move forward more quickly. So I think it's incumbent on all of us to be aware of that and think about it.

In terms of accelerating the pace of the program, there are actually some -- quite a few recommendations in many different camps. And I'm just going to run quickly

though a bunch of them and then dig more deeply into one that I think is very intriguing.

So mandates and deadlines came up quite a lot. There should be strict timelines, strict deadlines for action. There were other folks who said, well, it's just because the program is so broad, a huge list of chemicals, a huge universe of products, very hard to move quickly. And, you know, maybe the -- one solution would be to try to focus in more. Then there were folks who pointed to the statute itself, or the regulations, or the implementation as problematic, and in particularly, some folks who said, well, you know, it might be a good idea to just sort of evaluate the process and think about how the process could be streamlined effectively. So those were different perspectives.

And then there was also quite a lot of concern, 66 excerpts, specifically saying, you know, there's a funding problem here, a staffing problem, and that makes it very hard to move quickly. There's not a dedicated funding mechanism. And so that, you know, that would be a solution.

But this suggestion surprised me, and it's the one that I am focusing most on here because I really want your thoughts on this, which is, you know, this person described it while saying, well, there's only one bucket right now, one sort of -- or some people said there's only one track

through this program. And so maybe there should be a fast track and an R and D track for things where there's -- you know, where the -- you know, some chemicals or chemical product combinations are kind of obvious. Why do we need to go through this whole process, versus others where you really do need the process because it's a very complicated substitution challenge? And there were a number of folks who fleshed that out.

And when I analyzed all the excerpts just to sort of summarize, the three categories that came up that might -- and people, some people, were saying you could just skip, really, to a regulatory -- a presumptive regulatory response. You don't necessarily need and AA if you have a chemical that is not necessary for the function of the product. Some people specifically mentioned the mat materials with flame retardants in that category as an example.

And other folks pointed to, well, if you already have major players in the industry that have made a switch, so it's, you know, obviously feasible and workable to do, is that something that could go into a fast track?

And the third thing that came up was relevant to your discussion yesterday, is if there's a good AA already out there, why not use that and not require it to basically, you know, be repeated and go into the business community?

Which is why I thought it was particularly interesting.

And then there were also people who talked about the new -- and again, going back to what Elaine said this morning, the new rapid toxicology data that are out there, as well. So how do we get a better handle on that and use it more effectively? That came up as a challenge.

I'm not going to spend a lot of time on prioritization, thought there was a lot of -- there were a lot of thoughts on prioritization. I have to say, zero consensus emerged on how to prioritize chemicals. There were ideas all over the map. There were people who used -- I loved the term, look for the sick antelope, basically, look for chemicals that already have one foot out the door that -- where just California can, you know, by listing it, really take it off the market, make it -- you know, change the industry.

There were other people who said you've got to start taking more shots on goals, start defining the edges, so that's really a different approach of taking on more different substitution challenges.

Quite a few people talked about classes of chemicals or classes or product or functional use categories. And even some people said, well, look, at a certain hazard trait; like neurotoxicants came up because of their effects on kids.

And then others who said, you know, you should jump around. Because if you just send the signal you're going to focus in one product or one chemical class or something, somebody said, well, if you just send the signal you're going to look at PFAS in 18 different categories of product, everybody else is just going to go to sleep because they're not -- you know, they don't see themselves as having to pay any attention to the program.

And then there's also this idea, I just like this quote, so I put it in there, but, you know, relevant to food packaging which, you know, is a very broad product category with a lot of chemicals in it, and it's in the work plan and it's a challenge. And this was somebody from the NGO community saying, yeah, you can look at one piece of that, but you've still got a crap load of other toxic stuff, which I thought was sort of, you know, one perspective of that, you know, this push to go broad.

So most -- many people said that this program would have an impact by going broad. But then there were other people who said, but you don't want to go too broad because then you sort of drown. So as I said, no consensus on this issue, but it's obviously going to be an ongoing challenge.

Going on to alternatives analysis. The challenge here, people, you know, the folks from the business

community are really worried about this. And, you know, this first quote really exemplified it, "If I happen to be at the point of this lance, I would chew my arm off rather than do an alternatives analysis." That was a very vivid way of putting it.

But it's sort of -- it's going to be a just indeterminate amount of work, amount of expense, without -- you know, and it would be easy to bog down. And there were people from other perspectives, not just the business perspective, who are very concerned that this whole process will just bog down and not lead to action and lead to a sort of a clear, you know, beginning, middle and end, and outcome.

That, and then one person really focused in on the economic analysis piece, finding the especially, almost, you know, impossible to do and very problematic.

So that, I think, is something that, you know, I'm so glad that you're thinking about the AA process, because we really need to think about how to make it more effective, not really more effective because nobody's done it. That's the problem, it's all hypothetic.

So, you know, I'm talking to all these people and they have all these ideas, all these suggestions and all these worries. But, you know, we don't know how much of that is going to play out.

Now this slide is murder to read, so don't even try. But the point is that there are examples from Massachusetts, Maine, the European Union, BizNGO, all these other entities out there that have been looking at AAs.

I think Washington State, also, I couldn't fit it on the slide, has also a different model where they do a collaborative AA and bring different stakeholders to the table to talk about it.

You know, some of like, you know, Maine has this nifty thing where if they get an AA that doesn't meet standards of quality, they can actually charge a fee and have a third party do it. And that would be one was of sort of ensuring that you get a high-quality product.

And, you know, the EU, as many people know, has more of a sort of a rebuttable presumption, where the AA is basically used to show that you -- that something cannot be substituted. You know, so if you think you can't get rid of this chemical, substituted in a safer way, then you step forward.

So these are different thoughts.

The idea of a third-party review of the AA came up quite a bit as a way to maybe address some of the resource issues within the program. But that would require some kind of a fee, which also raised concerns. Folks in the business community were like, wait a minute, you know, those poor

companies doing the AA are already going to be spending a lot of money to do it. And then if you charge them a fee to review it, that will be even more onerous.

But then there were some people, including from the business community, who thought that there already was a fee for the review of the AA. And I actually had to go back to the regs, you know, I don't think so and, in fact, there is not. So that was interesting that there were people who already thought that there was a fee to review the AAs.

Now I'm going to just touch on a couple areas because SB 509, the, quote, "other green chemistry law" that passed at the same time and was double joined to AB 1879, so it's kind of a part of the analysis, too, there are two components to that, the Toxics Information Clearinghouse and the hazard traits. Not as many people were familiar with this law, but the people who were, were actually kind of over the moon about the hazard traits. The people who knew about this, they said these are really interesting.

And the Office of Environmental Health Hazard Assessment, OEHHA, did something really kind of cutting edge there that fits, that aligns really well with the new toxicology, the predictive toxicology that allows you to look at indicators or pathway based effects. And so this whole concept is very interesting. There were some people who said it should be updated, maybe, a little bit more.

And other -- a lot of people who are familiar with it kind of went, wow, this is really interesting, but then what happened with it? And so there was interesting in whether those could be integrated better into the program and used more.

And there were some specific ideas here. One had to do with the concern that the candidate chemicals list might be a bit stale and that it doesn't cover emerging chemicals, and that, therefore, using some of the information from the new toxicology, combined with the hazard traits, even if it didn't feed directly into the candidate chemicals list, that could sort of help identify emerging chemicals that might need to be watched more closely.

And then Toxics Information Clearinghouse was, in marked contrast, universally either greeted with a shrug of the shoulders, or a what is that, or a I looked it up right before I did this interview with you because I didn't, you know, didn't even know it was there. Nobody I know uses it. You can get more out of a Google search than out of -- than you can out of the TIC, all of those kinds of comments. Other people saying, you know, it was a good idea at the time, but now there's so many other resources out there. So a lot of people saying it's really not useful, that was clear.

The question is what to do with it? And there, there was a split with some people saying pull the plug, don't -- you know, it's not useful. Let's just use what else is out there. The state does not have the resources or the IT capability to do this. Other people saying, well, you know, we've got this law, we've got this -- you know, we have our responsibility to try to do something with this and to make it right, and that there might be ways to repurpose it and actually to use it to plug some useful information into other entities, like the International eChemPortal was mentioned. And so that, also, is something where I, you know, would be interested in thoughts from people in this room.

Two specific ideas that came out were, one, if there were more data call-ins, whether that information or some of it could go onto -- you know, into this, or the other is maybe if the hazard traits, and you know, maybe OEHHA should take over this function and use it for -- in association with the hazard traits reg.

All right, so I think we don't have a lot of time for this, but I do want to -- I am intending in the final report to devote, actually, a reasonable amount of time to these last two areas, because I think they were left behind in the statutes that created, you know, this program. And they were important ideas back then, and they are still

important ideas and there's still a role for that.

I mean, one is more around education of green chemists and education of experts to conduct alternatives analyses. All of that needs to happen. There needs to be more partnership between business and academia and government around really the positive side here, not the regulatory side, but the let's move this agenda forward. And also partnerships with business around developing safer chemicals. This idea of X prizes came up a few times.

And so this is a piece that is a little bit maybe, you know, it's certainly not directly related to the Safer Consumer Products Program, but, you know, I'm also interested in thoughts around this. It's a challenge to fund, but a lot of people pointed to clean energy and California's commitment to that issue and the, you know, the sort of, you know, can't we do that in this area? Why can't we really create some momentum?

So I'm sorry these questions are a little bit difficult to read, probably, from where many of you sit. But these were -- I have a lot of questions for you and a lot of interest in your thoughts in a lot of areas, so I'm just throwing these up, really questions about how to optimize the pace of the program. Do you think this idea of faster tracks and more deliberative tracks makes sense? And, if so, do you have suggestions about how to define those?

How concerned are you about the data gaps issue? Do you have suggestions about how to address that? And then what are your thoughts about sort of the new toxicology and how to fold that into maybe the hazard traits, you know, streamlining the AAs.

And, oh, wait, and then this other thing, question seven, is one possibility with all these around how to prioritize would be, you know, would this panel be an appropriate forum to do kind of a look back on the prioritization process so far, how it's gone, what, you know, what maybe could be done to think about what worked, what didn't work so well, how it could be improved, and would that be something that might be worth doing, like within the next year or so? Because, if so, that might be -- you know, you guys might actually be the right group to help think about this in a more in-depth way. So that's another suggestion.

And then, yeah, and revitalizing the academic and business partnerships piece of green chemistry.

So that's it. Sorry, it's kind of a lot to squeeze into -- and I went overtime, I'm sorry.

So should I sit down and then we'll just sort of have a discussion, or are there any questions before?

PANEL CO-CHAIR MORAN: Why don't you hang out for just a minute for -- well, we usually do informational and

clarifying questions, and I'm really going to ask everybody to keep it just to that. And then we can follow up with the discussion. And I think given the number of questions we have, it's going to be more efficient to do at least one once around the room, and then we can come back and do follow-up, so we'll see how much energy there is. But I think it's going to be hard to do our normal back and forth on that. So we'll start with stuff that's just informational and clarifying.

And while we're doing that, Dr. Solomon, you flipped very quickly through a couple slides about the pace of the program, and I'm wondering if you could go back and just let us look at those slides again?

DR. SOLOMON: All right. Yeah, I wasn't sure if you were going to be getting a copy of the slides in advance.

PANEL CO-CHAIR MORAN: Yeah, we did not, so -- and this contains some things that are --

DR. SOLOMON: Yeah. It's a lot of stuff to digest.

PANEL CO-CHAIR MORAN: And before this, I think there were two. Okay, yeah, so the next slide. Yeah. So if you could just leave that up there for a moment --

DR. SOLOMON: Okay. Yeah. Yeah.

PANEL CO-CHAIR MORAN: -- for us to start and just

to take a look at. And I think the next one. This is the only one I think you flipped through really fast; right?

DR. SOLOMON: Yeah, I think so.

PANEL CO-CHAIR MORAN: Okay. If anybody wants to see any other ones, I'll let you ask for that.

And so now I'm looking for informational and clarifying questions. And I see Ann to start.

Oh, Mark, actually, Mark was trying first, so I'm going to let Mark go.

And, Ann, are you -- you're not? Okay.

And then Jack? Oh, okay. Mark, Ann, Jack.

DR. NICAS: Yeah. The question I have is general. I mean, there's a lot of recommendations, for example, the fast track process to things more quickly. And I'm wondering what is within the realm of the Agency and what is within the realm of the legislature who created the process by which the Agency has to do things?

I mean, I don't think the Agency can just decide by themselves that we've going to create a fast track program, or can they? You know, if they can, they can. But if they can't, then it's not really so much a criticism of the Agency as a criticism of the legislature in setting up the program.

So I'm sort of wondering your perspective on the percent of all the recommendations that are made, what sort

of percent are in the hands of the Agency for what they can do?

DR. SOLOMON: Well, first of all, these aren't exactly intended as criticism. They're just sort of evaluating and, basically, conveying what people are seeing out there in the program. And some of these are definitely -- will very likely require legislative action. Others could be done through administrative changes. But, you know, sort of creating a fast-track-type approaches likely would, you know, I'm not an attorney, so it would likely require some action by the legislature.

PANEL CO-CHAIR MORAN: As we go to Ann, I just want to clarify, I think the scope of this review is actually bigger than Safer Consumer Products, because you included all the green chemistry issues. And it's my understanding that the review and our participation in this are actually intended to be supportive of the program in that a good review helps a program look at itself and get itself back on track. So I'm personally not seeing this as a criticism and not negative feedback to the staff, but rather constructive -- we're having a constructive dialogue here to help provide some information here and to the program about looking forward and what is it that might make it stronger and better and more robust, and other things that we're thinking about.

So I've got Ann, and then Jack.

PANEL MEMBER BLAKE: Thanks, Kelly. You took the words right out of my mouth, that this is a great opportunity.

And thank you, Gina, for doing this work. And it's really helpful to be able to look back, now that we have some, you know, some substance to look at and see, how do we do it better? It is a little terrifying that we've been doing this for ten years or more.

So my clarifying question is you said something, you had a quote that said skip straight to the AA. Is the idea behind that, that you bypass the regulatory listing and, therefore, save time?

DR. SOLOMON: So do you mean this one? Yes. This was something that came up when I was asking people about the role of the legislature, which was -- you know, because there's this sort of tension about like whether the legislature still should be, you know, looking at chemicals or not. And so some people said very much, you know, the legislature should still be absolutely free to act if they choose. Others saying, you know, the legislature really should stay out of it. It's not a good forum for dealing with complex technical issues. That should be dealt with at the Department level. So those two perspectives.

And then there was this sort of middle perspective

that I thought was particularly interesting which is, yeah, maybe there is a role for the legislature, but there should also then be -- you know, like the legislature could then skip and save quite a bit of time and effort if they want to act, but there should then still be some alternatives, you know, ability to look at alternatives and think about whether there really is a safer alternative before, you know, something is banned, for example, in a product.

PANEL MEMBER BLAKE: And so I think my follow-up question would be as we get into the discussion, which is how did this work for the leaden battery listing onto -- which I don't really understand how that happened, so if you can, if you want to address that now or later?

BRANCH CHIEF PALMER: Sure. The difference is that the legislature directed us to put lead in batteries in the Priority Product Work Plan, which means that like it's a little more specific than a category, but it's the same, evaluated to determine if we want to move it forward as a potential priority product, which would then require rulemaking.

PANEL CO-CHAIR MORAN: All right, Jack, then Tim.

PANEL MEMBER LIINARD: One of my questions, actually, comments was exactly what Mark said: Does the law itself actually allow a shortcut? Because I've heard A to M so many times, that that's a lot of things that a business

would have to cover. And the same thing, the regulatory agency also has to cover that. It's a lot of things to consider.

The other question, on the business community that you -- with which you interviewed, were any of the stakeholders those industries who are being impacted by the initial priority products group? I mean, not trade associations, not business groups, but actually the companies involved?

DR. SOLOMON: That's an interesting question. Yes, actually. And among the business interviewees, it was -- at the business community, it's really diverse. It was actually a little hard to get a handle on well to interview because they're -- you know, I spoke with some folks who are more in the chemical manufacturing end of the business, others that do product manufacturing, others that represent a variety of different companies and have represented those, you know, those entities before the program. So it was sort of a mix. Then some folks who are more sort of in the green chemistry business space.

So, yeah, it's a -- but, yes. And it was sort of I was trying to avoid too much talk about any specific product chemical combination. And so even though those did come up, I mostly sort of steered away from that, not totally.

But I'm glad you mentioned the A through M criteria. There were a number of people who talked about them. And again, there was a split, so many things there was a split, between some people saying it's horribly onerous if there were -- I remember somebody said if there was one thing I could change in the regulation, it would be -- or in the statute, sorry, I'm not on the right -- if there were one thing I could change in the statute, it would be the A through M criteria.

On the other hand, there were other people who were like, you know, those criteria are great. They require you to take a really broad look. You know, there was somebody who said I use those. This was actually somebody from the business community said that he uses those to teach and, you know, and uses them within their company because he thinks that they require that broad systems thinking. And then somebody else who has pointed to CEQA and said, you know, it's kind of like a CEQA analysis and, you know, you can do a neg deck in a day or two. It's not a big deal.

So there was that spectrum reflected there, too. I didn't get into that. So it's sort of interesting to -- it depends on how you think, I guess, about the depth of each of those issues.

PANEL CO-CHAIR MORAN: So I've got Tim, and we want informational and clarifying questions, and then we'll

move onto comments. And I'm looking at a go around the room as this first part on comments and response to so many things. And, probably, we'll be starting that with Tim too.

PANEL MEMBER MALLOY: Thanks. I'm just wondering if we could start on the other side, because I went first yesterday.

PANEL CO-CHAIR MORAN: All right. Would you like to --

PANEL MEMBER MALLOY: And also -- what's that?

PANEL CO-CHAIR MORAN: Oh, okay. I don't want to be in the middle of you, but I'd be happy to let Mike go first, if you'd prefer.

PANEL MEMBER MALLOY: And so I wanted to ask you a question. Can we talk about that process of going around the room and answering all the questions before we do it? I just had a suggestion for a different way of doing it. But I'm going to now ask my clarifying question.

First, I think this is terrific. That was a great presentation. And this is, I think, what a great process you guys set up. And also, I can't wait to read the report.

My question has to do -- I'm trying to figure out what the findings really mean in the sense of, like I agree with a lot of what's in here, well, I mean, on one side or the other or some of the things where they were split. But, you know, I think this -- a lot of this resonates.

But I'm curious, when you make these findings are you thinking about your -- like there's a vote among experts and here's what most experts say? Because this part of it seems to be written that way, as opposed to you looking at what different people said and then trying to be kind of an umpire or referee. So this thing reads more like here's where the consensus is, so let's make some changes. And I'm wondering if your intention is, when you write the report, to kind of like dig in and, you know, call it out?

Because one of the things I notice is, you know, the slides kind of count excerpts and, you know, so here's how you -- and I'm wondering if you're kind of planning on doing your own kind of independent viewpoint? So that's what I'm curious about.

DR. SOLOMON: Yes. And the answer is, yes, but that I haven't, on some of these issues, I haven't fully refined that. I'm actually in the process of doing it now. And I have draft recommendations, but there is still an opportunity to hone them. And I'm still having individual -- I'm doing this second round right now where I'm having some one-on-ones, and then some presentations with groups to just sort of get thoughts.

But also, I did put my thumb on the scale on some of these slides, so some of them I just sort of tabulated. But like with this sort of separate tracks, faster track,

slower track thing, I didn't tabulate that. I just thought it was a particularly intriguing idea that I wanted to pull out. And to be honest, it is something that I'm, you know, thinking about. And so if you say, oh, it's a terrible idea, that will be good to know. And if you say it's a good idea but, you know, you might enhance it in that way, that would also be good to know.

But, yeah, on a lot of these issues, I am going to have come down with some recommendations, which people could either like or not like. But I am mostly trying to describe what I heard at this point because, really, I didn't hear too many things that I thought were dead wrong. You know, there's a lot of -- there's a lot of nuance here, especially like on this -- the pace of the program issue, where I heard a lot of passion on different sides.

But all of those perspective, I thought, were sort of coming from a good place of -- you know, there weren't people who were saying, well, I don't want this program to work. And so if it slows down forever, that would be okay. And there weren't people who were saying, well, you just need to just sort of tumble forward and make decisions, regardless of whether they're good or bad decisions. I mean, everybody was somewhere, you know, coming from a good place on it, but there were differences of opinion, obviously.

PANEL CO-CHAIR MORAN: Mike, and then I want to wrap up the informational and clarifying questions.

PANEL MEMBER CARINGELLO: Yeah, and a simple question.

With the pacing issue that there was a lot of polarity around, are they talking about the pacing of the number of priority products that are coming out, or are they talking about how rapidly it goes from we're going to start to propose one, propose this, there's workshops, and the whole process once one starts?

DR. SOLOMON: I think both, but that is a good question. I think some folks kind of conflated the two. And others were just sort of thinking generally that, you know, that -- and thinking about the fact that, really, nothing has gotten across the so-called finish line in terms of having, you know, gone through an AA process, so that there's -- there were people who were saying, well, we still don't really fully know how the system would work because of that. So there are concerns about -- on all of those fronts, yeah.

PANEL CO-CHAIR MORAN: I missed Ken Geiser.

Ken?

PANEL MEMBER GEISER: Gina, thank you very much. I also thought the report was very good and enjoyed reading it and all. And I thank you, also, for doing it. But that also

raises a question for me, just for clarification, because I do want to make some comments, but I'll hold those.

But what is your -- where do you see this report -- who do you think the audience of it is and where do you -- is it likely that the Public Health Institute presents this to the legislature, or this is a publication for journals, or how do you -- where -- how do you get this out and where -- and who do you think is the readership?

DR. SOLOMON: There is a journal article that is in review right now, actually. And so it will very likely be coming out, you know, as a journal article sometime, I hope, this fall.

The report will also be coming out this fall. And it really is wonky, so it's really not necessarily -- I mean, you know, I think it's riveting reading and you do, too, but many people out there in the real world will not find it riveting reading.

But, you know, there is going to be a new administration coming in. There's, you know, there's quite a bit of interest in the legislature in this program. And actually, I think the legislature really does want this program to work for all kinds of reasons, including the fact that they don't want to have to deal with figuring out what to do about chemicals, so they want an effective program here. And so there's, I think, some potential, if there are

some legislative adjustments or some regulatory, or just process adjustments that, you know, at all of those levels, there could be some interest.

There is a follow-on, a little bit of follow-on funding to do some dissemination and engagement around the report once it does come out, so that's going to be running into January, February, March when there will be new legislators and a new governor, and so that might help sort of get it out there.

PANEL CO-CHAIR MORAN: Thank you, Dr. Solomon.

At this point, I really want to bring this back to the Panel, so probably now is a good time to have a seat and be a little more relaxed.

And Tim had a suggestion. I really, I'm struggling here with how to do this. We have ten questions from Gina, plus another half-dozen from the staff in our packets. We have 45 minutes before our break, and then another hour thereafter. So -- and I think we could probably easily go through all of that. And I love the more interactive form of discussion, but I'm looking at the number of various things that are out there and I'm thinking that a once around would help us pull out what the main issues are. And then we could consult at the break and come back and talk about some more things, particularly if folks identify stuff for discussion.

But I'm really interested in what Tim Malloy has to suggest here.

PANEL MEMBER MALLOY: I was feeling that like the once around on all the questions, to where we are, really kind of makes it hard to have -- it's great -- if what you're trying, to prioritize what to talk about, then it might be better to talk about -- to ask people, what do you want to talk about, rather than to ask us all to comment on everything. Because I just feel like then we lose like the value that is inherent in this group of the putting your card when you want to say it, and the back and forth and it hones in on things.

So I don't think having us all say something about what we think is important as a prioritization tool works. I'd rather see us kind of go around quickly and say here's what we think we should talk about or do something to get priority, and then have -- set an amount of time to talk about the most important questions with a more interactive -- because I think the thing with the card really allows you to kind of gage interactively about what people want to talk about. Because when there's no more cards, then no one wants to talk about it at that point.

You know, and I say this with great respect and affection. I'm not trying to -- it's just like I feel like when do that thing, it kind of puts a drag on the

conversation. And it's hard to answer, you know, eight questions in 30 seconds, you know what I mean? So that's all. And I'm happy with however you want to do it. I just wanted to kind of raise that as a possible way.

DEPUTY DIRECTOR WILLIAMS: Just editorially, I also like a more dynamic conversation. But I just wanted to offer to recraft the questions from the program because I think we don't need to go through all of these.

I think the general question is: Are there observations that you all have that are significantly different than what you heard today, just generally, you know, did something surprise you or is it inconsistent with what you've seen, and then somewhat getting to this question about prioritization on anything that you feel is actionable?

So that's kind of the overarching.

PANEL CO-CHAIR MORAN: Are folks good with those two questions? Maybe that's where we should start.

So the first one is do you have observations that are different or in addition to the ones that we heard today? And the second one is, do you have suggestions for implementation priorities or implementation to the recommendations? Is that how you said it? Yeah. Okay.

I'm actually super interested in folks -- if folks -- the first question, are you -- do you have

observations that are different or in addition to those? Would folks be good with -- I want to make sure that at some point here we do have the ability to let everybody weigh in on other stuff. And maybe what we should do is do that at the end and start with the conversation, because I hear a lot of energy for a conversation.

So I'm going to suggest we start with, do you have observations that are different than or in addition to what's there?

So this is where scientists are really good at poking holes. And I think you all are particularly skilled in this area. And I see Ellen, Jack, and Ken.

PANEL MEMBER HOLDER: So many people talked about the pacing and, you know, obviously this idea of fast track has come up. Just a little bit of go back in time.

If you recall, that was actually one of the original ideas, was to have multiple paths. And I find it very interesting that the people who are asking for a fast track are the ones who killed the fast track in the first place, because it was the progressive voices that said we could not lower the bar for anyone under any circumstances, and so we had to hold everybody to the same very high standard. And so I see nodding. Yeah. Yeah. We all remember this conversation.

And so that would be my concern about spinning up

any sort of effort to try to get a fast track. I have a very strong sense that that's where we'd end up in terms of the content.

Now the action I would suggest we think about is, instead, asking the question: What is legally allowable within the scope of the regs, and then major -- also in the legislation, for injecting into a later part of the process, so with lead acid, forced it into the work plan? Can we go a little bit farther and force it to rulemaking? I don't know if anyone has thought to that. But like sort of like push the boundaries of what's there, then figure out if we needed to make an amendment to inject further into the process.

PANEL CO-CHAIR MORAN: Thanks, Helen.

So we've got Jack, Ken, and Ann.

PANEL MEMBER LINARD: Just, this is a comment on the research done for the paper, but also it's a comment on the industry itself, and that is you listed a number of alternative assessments, all done by the BizNGOs and things like that, yet one of the things that industry has been pointing out for a decade is this is what industry does every day, and yet there aren't any representatives from industry on that list. So I think it's a criticism of industry, too, that they haven't provided any AAs in the public domain.

So I think, again, I'm just recognizing, this is

something. I mean, you had, actually, a relatively few number, but if you look at the number of AAs hat industry does, it's a lot more than that. And I think we should make an effort to get some of those factors into this, and maybe not in this report, but certainly we need to get that information, and what are the pros, the pluses, the minuses? How do you go about it? How do you prioritize it? That's all done every day. Most of my phone calls are actually doing just that.

So that's one.

Green chemistry; I am a chemist. I hate the term green chemist, primarily because I think it's a term that should die quickly. I think any chemist should be very familiar with the green chemistry principles and practices. So rather than set apart a separate, you know, here, you're a green chemist, but you're a regular chemist, to me, all of that should be factored into becoming a chemist in the first place. So I hate the idea of separating the two. To me, it should be one in the same. To be a chemist, you should be trained in these methods, period.

In terms of speeding things up, I think we touched on it yesterday, and I'm not sure where we ended up. But children's sleep pads, if nobody -- if everybody has gotten out of them and there's nobody using them, can't we just find a way to end the process and not waste time with going

through the procedures? Obviously, we're going to keep it active. As Karl said, it's still there. But I think why continue to waste time if nobody is using it? We can stop it. And in a way, it's already accomplished a goal of the program. Whoever was in it is now out, but we don't have to waste time and resource continuing on what is required in the regulations.

Is there a way just to stop it, put it on hiatus, put it on a shelf and keep it there, make sure people are aware of it but, you know, go on to the new topics?

PANEL CO-CHAIR MORAN: Ken, and Meg.

PANEL MEMBER GEISER: There were two questions, so I want to make sure I'm separating.

The first question is: Did we see something else that wasn't --

PANEL CO-CHAIR MORAN: Yeah.

PANEL MEMBER GEISER: And the second was?

More Yeah. So the first one is: Do you see something that's not there or have a different view on what was there? And then the second one is about implementation, priorities for implementation, ways of implementing some of the recommendations. So we're on the first one at this point.

PANEL MEMBER GEISER: Okay. All right. Yeah. I guess --

PANEL CO-CHAIR MORAN: Oh, I'm sorry. So what I was trying to do was get folks to poke holes in this part of the conversation.

So do you see a hole here? Do you see something that you might have brought up that wasn't there, or do you have a starkly different view? And once we get those out, which looks like it's going to be a pretty small number, then we can move into the second part of the conversation.

PANEL MEMBER GEISER: Right. Okay, so I'll do that.

So one of the things, I listened to your presentation, Gina, with great comfort and enjoyed it very much. And I was -- now, it's true, I have not been nosing around the California business community for a couple of years, but when I was several years ago, there was a lot of passion about this program, and a lot of angst, and a lot of feeling like it was too complicated, too slow, it was, you know, interfering, it was all kinds of different things. And we had a lot of presence of a business association here testifying to us and elsewhere. When you presented it all, it sounded to me so comfortable.

And I just wonder, have we -- has the whole California community just settled into something so accepting of this that -- or is it viewed more that Gina Solomon is just such a nice person that you're filtering

some of the passion and anger that I initially heard.

So I guess that's one point.

And the other, you made the point early on, or you continued to nudge at it, and that is there's the issue of what the statute does and what's the response to the statute, and there's the issue of what the program does and what the response to the program is. And I'm curious to hear because I hear them as different, the way people look at the program here and the way they look at the statute. Could you say a word or two about this?

DR. SOLOMON: On your first question about the business community, I think that the relatively sanguine, though not fully sanguine, sort of reactions that I got from the business community probably had more to do with selection by us than anything else in that the selection criteria included having quite a bit of expertise and, you know, understanding of the program. I was looking for people who really know what this program is about, who are either involved in, you know, sort of working on the original legislation, or who are very involved now. And many of those people, I think, you know, accept generally the principle of the program and are not actively trying to eliminate it.

And I think there is a pretty strong perspective in the business community that the structure for dealing

with, you know, chemicals in products is better placed, you know, within the Department than in the legislature. And so I think I heard that tradeoff of, well, we don't want to go back to the days of having, you know, a slew of band belts was, you know, the type of comment that I heard quite a bit from people in the business community.

And so I heard, even from people who are passionately opposed to individual product listings and who, in fact, are representing, you know, companies that are -- you know, that make some of these products are saying, you know, it's in the business community's interest to have a program that works. So -- and then a number of people said, you know, the business community supported this legislation. And, you know, so it's kind of that was the theme.

So it may be selection-bias. And if I went out there to people in the business community who are not as familiar with the program and who maybe were sort of feeling that tug of being pulled in, you know, I didn't talk, to be honest, like with the spray polyurethane folks. Those people were sort of pulled in and may have a different perspective.

And then in terms of the difference between the statute and the program, you know, I didn't ask questions to really tease the two apart. I mean, I did ask questions, obviously, about things that were not directly a part of the

Safer Consumer Products Program in this presentation, other than talking a little bit about 509 and mentioning green chemistry generally, or sort of all that stuff at the end. I didn't emphasize those other pieces as much.

PANEL CO-CHAIR MORAN: Art?

Oh, Meredith, do you want to weigh in?

DEPUTY DIRECTOR WILLIAMS: And I would actually make three distinctions; there's the statute, there's the regulation, and there's how we've implemented it. So I would just parse it even further.

PANEL CO-CHAIR FONG: Thank you very much.

And, Gina, that's just an excellent study. It was so informative. And for someone that has been doing this for, again, over ten years, I really -- it was really nice to see you summarizing, you know, the progress and where we can go from here.

I just want to touch on a couple of points that Jack made regarding -- the first one is about the absence of industry AAs on your list. And I was wondering if that is not -- if that's due to the fact that business is just reluctant to share that information, or is this a situation where, in fact, businesses don't get the kind of formal AAs that's part of the SCP Program. I mean, we do material selection and decisions based on various types of analysis every day and we just -- I think that's what Jack was

pointing to.

And in terms of actually doing formal AAs, I certainly don't do a full-blown AA every time I make a material selection decision. So because of that, it's really hard for me to actually provide, you know, you with an AA in a format that's consistent with what would be done by an NGO or, you know, for regulatory purposes.

So that's one comment.

The other comment about, you know, what Jack was saying about in terms in fast tracking, especially in situations where major companies already have made the switch. And in terms, actually, for my kind of simplistic way of looking at this, instead of then going to like (indiscernible) or just going to regulatory response, I'm just thinking, doesn't it make a lot more sense to then not put that on the list, or go through the process of actually listing it as a priority product? So just --

PANEL CO-CHAIR MORAN: And I'm going to hop in with, well, actually, my idea of, one, having to do with the observations, different thing.

And, Meg, you too?

PANEL MEMBER SCHWARZMAN: (Off mike.) (Indiscernible.)

PANEL CO-CHAIR MORAN: Oh, okay. Yeah. I'll just drop in my little comment here, and then move on to Mike,

Meg, Helen.

So my little one is just that one issue that I'm seeing that's just starting to unfold is the example from the -- for NDI, where the industry association has gotten involved and is appealing the regulation. And I'm also seeing that same thing, kind of thing, starting on the perflourinated chemicals. The industry association is clearly very heavily involved in this.

And I understand that concern about delays. One of the structurings of the regulations was to try to separate the interests of the chemical manufacturers from the interests from the people who were actually making and selling a product to consumers, and to really focus the program on the people who are making and focusing the product -- you know, making the product for consumers because they can have a choice of chemicals and chemistries and various things that they're going to do in terms of designing and selling their product, what kind of business are they in, and so on.

And what I'm seeing here worries me a little bit in terms of speed of the process. You know, do we have the structure fully right here? Do industry associations, should they have the standing to be able to enter the process in the ways that could cause it to be fully delayed? So industry associations are focusing -- you know,

functioning as a stakeholder, like everyone else, chemical manufacturers and others and all the other people in the world. I really understand.

But what standing do they have to pull the process further along, delay it further, is, for me, a question that we'll probably learn more about as this process unfolds, but it seems something that might be worth examining.

So I've got Mike, and then Meg. And if you have a comment on this gaps area, I suggest you put your flag up now, so that then we can move on, too, and Helen. So I've got Mike, Meg, and Helen. And if you don't have your flag up at the end of this, I'm going to assume that we should move on to the next question.

PANEL MEMBER CARINGELLO: So first, I just want to also say I really enjoyed the presentation. And I really thought the excerpts were phenomenal. They brought to life what you were talking about. And you added a lot of wit to them, so thank you for including those.

So a thing I was thinking about, one of your slides, you were talking about transparency and confidential business information, and you mentioned that you were looking at regulations, other than this one, too. It was a whole broad spectrum of green chemistry initiatives that you considered. And I was wondering, in California now there's the Ingredient Disclosure Initiative that is going full

speed ahead, and it's going to potentially give a lot more information on things that are -- closer? Sorry, I'm normally so loud.

DR. SOLOMON: I can hear you.

PANEL MEMBER CARINGELLO: Okay. So we've got the California Ingredient Disclosure requirements that are potentially going to be very mineable for DTSC to look and say, okay, what ingredients are out there being intentionally used? And then there's the New York requirements that are coming to life that go even further than the California. So for a change, California is not in the lead. I think California, maybe, is more meaningful in some cases, but it's going to be a different subset. And is that something that was looked at in the study and can be then used by DTSC as part of the program, do you think?

DR. SOLOMON: Well, the recent legislation on ingredients in cleaning products came up quite a bit. People mentioned it as a model and an example of this sort of concept, you know, that some people termed radical transparency, the idea of getting more information out to the public. There were a number of folks who talked about that as a potential model for other sectors, that it should go beyond a cleaning product, and maybe that that would be something to build on over time. That was sort of the camp who are like, you know, most ingredients and most things

should be public, which was one perspective.

Then there were others who were saying, well, maybe not go that far, but at least DTSC should be able to get the information, even if it wouldn't be completely public, so that was a different perspective.

PANEL CO-CHAIR MORAN: Thank you both.

Meg, then Helen.

PANEL MEMBER SCHWARZMAN: I honestly can't figure out which category my comments fit into. And it's a topic that's been being discussed, so it seemed fair.

It's broadly on this issues of a single -- of a fast track. But I don't think -- I'm kind of looking for a different -- the reason I'm thinking it falls into the alternative ideas section is because I wanted to kind of reframe it, potentially, to be about sort of alternative points of access, or like a diversity of points of access, rather than creating like a parallel fast track. But in a way, this is what Gina has highlighted by saying sort of these are the conditions where, I don't know, we might skip to a regulatory response, or these are the conditions where we might skip to an alternatives assessment. And I wanted to parse those just a little bit because I had thoughts about them.

One of the list of three things under "skip to a regulatory response if" were "if a chemical isn't necessary

or companies have already switched." And in my mind, I actually think that would be like access the regulatory process at alternatives analysis, because the premise of the regulation -- or of the program is that you don't make switches without considering alternatives. And so if it's not necessary or there are switches happening, you go into the alternatives assessment process, not a regulatory response. Because the industry may have switched, but to something that turns out to be hazardous, and that's the whole point of this program and doing it in this way.

So I almost feel like those are access points to AA, not to regulatory response. And if there's an acceptable AA, then maybe that's, which is the third point that you had under that, that's an access point to regulatory response because that's the flow of the program, right, is alternatives analysis regulatory response.

The challenge with the, as I'm sure everybody is thinking about, with -- if there's an acceptable AA is we saw in the Department's analysis presented yesterday that none of the AAs that were deemed, you know, significant enough to really do a deep investigation into met the criteria for the SCP Program, including the one that DTSC commissioned. And granted, its goal was not to meet the requirements of the SCP Program, but that's why I was asking a little bit about that. It sounded like mainly it was a

budgetary issue, might have been, or just not what you needed input about right then.

But it makes me wonder if there might be a way to say, well, here's this really good AA that's missing criteria H, L and, you know, P. And so let's focus on fleshing out those parts of the criteria, starting with this, you know, three-quarters-done AA, or it doesn't have enough information about functional use and necessity, or we might have a little difference with how the performance criteria were defined, which were kind of the issues I was highlighting yesterday, is how broad that -- how much people might differ in how they define level of necessary performance to be an acceptable alternative.

So I'm interested in with Karl has said, and Meredith, both, about how much exchange they hope to have with responsible entities during the alternatives assessment process and how engaged they hope that process will be. And I wonder if there's a way to enshrine that, you know, maybe not in -- maybe in the implementation process, not in -- we're not talking about changing statute. It seems like statutory changes would be required for different points of access.

But at least as an interim measure, to make that AA process somehow enshrined in the implementation, and I'm like getting pretty foggy about how this would look, but

that interactive process, so that you have the opportunity to say, look, there's this model AA that already does, in our view, good work in these areas, and what's lacking is this or, you know, we don't see any definition of functional use here and it needs that, whatever, that there could be a slightly more formalized process for that, that's in the hands of the Department, and then, implementations choice. It might at least be a step. It doesn't change the statutory requirements and it doesn't establish a new point of access, which is one of the other suggestions that I think I'm making. But maybe there's a range of ways of starting to get at the point of that.

The second category that Gina had was skip to the AA, if the legislature wants action on a chemical. And I guess what I'm doing is kind of rolling up everything into there's only one -- there's this alternative thing of go to AA. And my question for the Department is, so that would subvert the process of refining the priority product? That, I've heard the Department staff talk about, is a useful process for at least these first priority products. There were changes that were made to the spray polyurethane foam priority product that were pretty critical. The fact of designating the priority product, I get the sense it brings interested parties to the table and starts some conversations and makes information available to the

Department that might not have been available beforehand.

And so I just was wondering if Staff might reflect a little bit on what it would mean to skip that process, and whether that's something you might consider as you build experience with it; right? Like these first few cases were a really high learning curve for the Department. But if there are -- if that seems like a possibility, or if that would be missing a really important phase of kind of fleshing out the priority product understanding?

PANEL CO-CHAIR MORAN: As we transition to Meredith to answer this question, I think this whole topic that Meg is starting on is actually one that we need to discuss. So I want to --

DEPUTY DIRECTOR WILLIAMS: (Off mike.) (Indiscernible.)

PANEL CO-CHAIR MORAN: Yeah. So Helen's been waiting for a while, so I'm thinking of that. And then let's have a little chat about this.

The other topic where I think we really need to have a chat is other ways of streamlining the process, and streamlining seems to be a really important theme here. So I want to make sure we get those as part of our implementation discussion.

But let's let Helen go.

PANEL MEMBER HOLDER: I wanted to go back to the

methodological framing at the beginning of this being a qualitative versus a quantitative. I really like the fact that it's rich, and I like the quotes and so on. And it starts to raise the question, though, of is this, to Tim's point, is this sort of just a consensus of how its perceived by a very knowledgeable community, but not necessarily indicating how the actual outcome or the success is; right? So is this a group thing, or are we all just sort of patting ourselves on the back?

And so -- and we do have a couple of different ways that we're looking at the success; right? So we've got the internal focus, benchmark oversight that the program has. We've got a little bit of market monitoring that, you know, we're starting to see.

So my question might be to you is: Is there some other hard outcome-based monitoring or study that we want to recommend, in addition to these three, the qualitative, the internally-focused, and the market monitoring, to just be like are the regulations meeting the actual outcome goals, not are they -- not are we able to turn the crank, but are we actually getting that public health impact that the original legislation intended?

And so that would be a question, is, you know, is there something missing or something that we want to add to that on the outcome, and quantitative, as opposed to

qualitative?

PANEL CO-CHAIR MORAN: And I want to thank all of you for your comments on the gaps because this is -- it's both reinforcing a lot of stuff that was covered and providing, as we should, some new thoughts.

So I'll turn this over to Meredith and maybe you can respond to Meg and help us a little bit with this discussion of the potential for the fast track option that Gina has asked us to respond to?

DEPUTY DIRECTOR WILLIAMS: And I think Karl and I are going to tag-team this.

In terms of the actual value and process of going through prioritization, listing a product, developing a technical document, et cetera, et cetera, yes, it definitely leads to engagement. But I think that that hasn't really been a problem for us, except for in one area, I'll just, I'll call it out, which is of all of the different products we've mentioned we've had good engagement from, you know, the nail salon products manufacturers, from the perflourinated chemicals manufacturers, et cetera.

The one area, I would say, is the care and treatment products for the PFAS. When we had that workshop, none of them showed up.

And so in general, I think that because there's a -- because we're California, I don't know why, we do get

engagement. And so I don't know that that process is what drives that engagement.

And then I will also say that in terms of what we've done in terms of the technical documentation, I think it is appropriate for us to take a step back and figure out how much of that is needed. So let me give you an example, and I'll be pretty explicit about it which my staff will probably kill me for.

So in the normal (indiscernible) case, our primary fundamental concern about (indiscernible) in laundry detergents is aquatic toxicity, however, there are some. You know, it's a human endocrine disruptor -- endocrine disruptor, too. How much time to we need to invest in addressing that when our primary concern is aquatic toxicity, you know? And trying to find that sweet spot has been a challenge for us.

And so I do think that there are -- there are things that even we could do on our end to stay focused, perhaps. We set a pretty high bar for ourselves in terms of the technical documentation. And I don't know -- and I think it's incredibly important for the robustness and the legal defensibility, et cetera. And circumventing that could lead to problems in terms of making sure. I mean, there's a scientific purity build into our process. What happens to that if we circumvent that step?

PANEL MEMBER SCHWARZMAN: Can I ask another question related to that?

DEPUTY DIRECTOR WILLIAMS: Yes.

PANEL MEMBER SCHWARZMAN: You know, one of the things that we heard about in public comment yesterday and that is echoed by Gina's work is this tension that's developing between the legislature handing everything over to the Safer Consumer Products Program versus should they still be taking action? And that was something that came up in this work.

And I guess that's one of the things that I'm asking is, I don't know if you can offer an opinion about this, but what if the legislature -- so my personal opinion is that the limitations on the SCP Program as it currently exists are sufficient that for the legislature to completely let go of their responsibility makes the whole state's effort on toxics too small, too limited. So that's my -- just my opinion about that.

And so given that, if I still want the legislature to take action, but I want it to take action within the context of the SCP Program, the way that I envision that is they would take some action and say -- require companies to do an alternatives assessment on this, so they would essentially pick something that would when you didn't do your priority product designation process.

So you've just talked really usefully, which I really appreciate, about ways to kind of speed your prioritization process, and that some of the maybe timelines and the public process haven't been the key to their utility, to that processes' utility. But I guess I'm asking, also, another question of like the impacts of skipping that process entirely for something that the legislature wants to take action?

DEPUTY DIRECTOR WILLIAMS: I would say that it could be appropriate for the legislature to do that and to -- but one of the things that perhaps they should task the Department with is, for instance, doing a conceptual model about the -- giving the manufacturers some kind of starting point, some kind of set of parameters for doing that alternatives analysis. I mean, one of the things that happens as a result of our rulemaking is we identify hazards that need to be considered. We give them a starting point for trying to identify those relevant factors, and I still think that that's going to. Given the scope of the AA, they need to have some starting point. And I would probably suggest that that -- that something along those lines needs to be included.

BRANCH CHIEF PALMER: And I'll just briefly add to that, and then I'll address your first point and comment, is that I think it's important to understand that we hear often

from industry and everyone, they want certainty. And what we're dealing with often is lack of information, data, and uncertainties. But the question of our framework is the AA process, and this process is very different from other regulatory approaches.

So part of the question and challenge is that as scientists, we want answers too. We want to be confident that we're moving forward based on enough information to go to the next step, and we've raised that. That bar is fairly high. It creates discomfort for many people to get there because there's an expectation by many that before we get to an AA, that we have to prove that there's a problem. And we and many people are also thinking that we're going to know where it's going to end up. And we're constantly saying, look, we have enough here to ask the question and to move this forward. We're not predetermining the outcome or any regulatory response.

So that's a cultural thing that I think is a good question and perspective to keep in mind as we say how do we make decisions that might accelerate this, and what does the framework look like?

On your first question about the engagement -- or, excuse me, skipping and what can we -- what do we expect in terms of engagement in the AA process that would be helpful? Yes, it clearly is, still is our hope that as we get into

that process, that we will actually have real-world examples that will be public on a variety of fronts.

How do you deal with uncertainty? How do you make decisions in that context? How do you address Helen's issue of how do you evaluate relevant factors through this long list of potential things you need to consider? How do you go about that and document that and put that in an AA? And, obviously, there's a -- it depends on the product. And within each category, within each priority product, there's going to be a variety of perspectives.

So we are -- we've -- and we are very gratified to hear your input yesterday that we've done a lot to set up these general frameworks and guidance things, and the devil's in the details, let's get on with it. That was our hope, and still is our hope, that that will be in the process, generating examples, case studies, real-world examples highlighting where we can focus our issues and our resources to better address really key things that need to be addressed, rather than the whole enchilada.

So it's going to be very important, whether it's methylene chloride, SPF, or the next one in line, and they will all have their own challenges. But I think that's where we'll get come certainty, because people will see the Department's decision making around that AA, which will then give some people some comfort in terms of how we're

implementing our regulations and the mandates in the law, so it's very important.

PANEL CO-CHAIR MORAN: So I'd like to ask a follow-up to this. We're talking about in the context of AA, but I know of at least one example where Department is kind of thinking the AA isn't the best process as the leaden fishing weights. And I'm wondering if you could remark on that kind of thing? And when I hear -- when I say the Department thinks the AA isn't the best process, part of that is because the Department is keenly aware of the alternatives that are available and, in some sense, has already gone through the thought process of the AA on that.

DEPUTY DIRECTOR WILLIAMS: It does make me want to step back, channel Debbie Rafael, who was very clear about this. Every -- as the regs were being adopted, there will still be a very important role for the legislature. And I -- we think that's the case.

I think what our concern has been is with the program at its infancy, you know, we need to -- we can answer this question with much more intelligence now than we could have three years ago. And we now have a better idea of where that appropriate leverage point for the legislator -- legislation -- legislature could be.

But with the leaden fishing weights example, lead is bad. Lead is ending up in the environment as a result of

fishing. There's no doubt about exposure, you know? It's pretty well established. There are alternatives. You don't need to do an alternatives analysis, they're already on the market; right? And so for us to spend our precious few resources going through the reg process and getting to the alternatives analysis didn't seem like the best use of our resources.

That said, I think we would be happy if those alternatives were being pursued more aggressively.

PANEL CO-CHAIR MORAN: So we've got a few minutes before the break, and I know Ann has been patiently waiting, and so has -- and Tim just started, so we'll see how far we can get before our break.

PANEL MEMBER BLAKE: Thank you. I've been sitting here kind of struggling and maybe backing up and saying, all right, what problem are we trying to solve, and is this the place to solve it?

So thank you, Meredith, you kind of led me down that road, is that my understanding is there are -- the perception is that there are bad actor chemicals out there that we don't necessarily want to have -- to spend DTSC's resources on because it's so obvious, but then that means that we're not really applying a standard. So what standard should we apply in that context to decide that it's a bad actor? Who makes that decision? Who manages that process?

And I think there may be cases, and I don't really know how to test this, but there may be cases and, you know, that these other cases like this have been brought to the legislature for an out-and-out ban, and the legislature has been punting it to SCP, and I don't think that's appropriate, but I'm not quite sure how to navigate how to solve that problem.

It seems to me that these bad actors, clear bad actors with ready alternatives to lead fishing weights, where do those fit? We don't want to let them drop off. But I totally understand that in the prioritization of this program, they don't belong here either. So I think that's what I'm sitting with is how do we -- that's a fast track that didn't come up in your discussions.

I mean, Meg, you framed this beautifully, the diversity of points of access for when it's clear. When something's not necessary, it's already phased out. Alternatives are readily available, or an alternative assessment exists that could be readily used with some adjustment. But we still have this bad actor fast track that we haven't really dealt with.

And so that's -- I think I'm just leaving us with the question of how do we cope with that?

PANEL CO-CHAIR MORAN: All right, on fast track options, Tim?

PANEL MEMBER MALLOY: I just want to say four things. Okay.

So on the pace of the program -- oh, thank you -- on the pace of the program question on prioritization, I think that's definitely worth looking at. I saw you had a suggestion, maybe this is the body to look at that. Maybe it is. Maybe it isn't. But maybe with like some background work being done first and then we talk about it?

I agree with Helen. I think it's really important to look at the actual on-the-ground dynamics that are happening. People have their perceptions and I may or may not agree with them, but when it comes time to actually evaluate a program, I think you've got to like dig in and see what happened in these instances and what are our metrics for success or not successful, as opposed to -- so again, so I think that's worth looking into.

On terms of the faster track, and particularly, I think Jack brought it up originally yesterday and it's so resonant today about this question about what, when it's obvious, like the fishing weights or where people aren't doing it anymore, I think that makes sense to have a way in.

And I agree with Helen again, this like a great day, I agree with Helen again that for the older people in the group, in the sense of like how long the group's been there, there were extensive back and forths about this early

on, and a fast track didn't end up in the regs. I think it makes sense to have such a thing in these instances. And I think a simple change to the regs, that's certainly within the Department's authority. The statute doesn't require that it be set up to have the manufacturers doing AAs. That was a decision. The statute says there needs to be an AA, and the Department could do that.

So it would be -- when you look at the regs, how they're written, you might even be able to read them creatively to allow the Department to do an AA and do a regulatory response, but it would be very creative. But it would be fairly simple for the Department to make a change to the regs, just give them the ability to do an AA. And at that point, they could go ahead and then move on to a regulatory response. I don't know.

Like when you said in the lead weight thing, we don't need to do an AA, I think what you really meant was we don't need to do the kind of AA that everybody is picturing under these regs; right? I think you do need to do a thoughtful analysis, pull all that stuff together to support a regulatory. I think that's what you mean. You don't need to do -- and I agree with that. And so, you know, maybe you could do that sort of thing. So I would suggest looking at that and -- right?

There is another way of doing fast track which is

like this example where there's clear alternatives. We've already made a determination that this is a problem and some act -- I mean, maybe you could work with some of your partner agencies. Like the California Department of Public Health has authority under the Hazardous Substances Act to take action with respect to chemicals, hazardous materials when it's been determined that they're a problem. They don't use that very much, but that's certainly already a provision. And it seems to me -- I guess I don't get to talk anymore today.

All right, so anyway, okay, changing the AA process, you know, all the complaints about AA, I mean, you know, I just -- I do kind of feel like it's overblown in the sense of, like somebody here already said, we haven't done one yet. So was that you, Mike? So how do we know there's really a problem with them?

I think, in part, it's because -- and maybe we all share some blame here. I've heard various people on this panel in the -- earlier on who talked about how much has to be in an AA. And people were being cautious and didn't want to talk about how limited it might be, have to be, you know?

So I think -- but I think we -- before we go back and start changing the AA process, because there were so many conversations about it, let's get some in and then go back. Like on the prioritization, we've done some. We know

there might be problems, now let's go back and look at it. On the AA, we haven't done any yet. None have come in, so this is all hypothetical. And I think it's worthwhile to maybe step back and wait on that one.

And then lastly, on funding, which was brought up, that seems to me, also, to be worthwhile to look at. But I think that really needs some serious analysis in terms of like how does the spending happen? What is the money spent on? How could it be supplemented? There's been lots of conversations about that. And I liked the provision in here that said maybe what they ought to do is fund a study to think about the long-term sustainability of this, as opposed to kind of a knee-jerk reaction to the funding problem.

That's it.

PANEL CO-CHAIR MORAN: Jack promises one minute. Oh, you're taking it -- okay.

Yeah, so why don't we -- it's break time and I'd suggest we take a break. We will end that break at a quarter 'til, and I will, looking -- be looking for derrieres in chairs at that time. And Tim can get a sign between now and then so he can talk again.

And when we come back, let's focus on implementation, so -- of the recommendations and thoughts about how we might proceed in that. A couple of things we might want to talk about is a little more about the

streamlining ideas in particular, but I think, also, we should open the conversation more broadly in that regard. And we might consider whether there are specific issues where the Panel might be able to advise the Department. So I'm sensing that need to dig down into some of these recommendations to get some more practicalities. And the Department may end up wanting to come to the Panel to get some advice on some of that.

So thanks.

(Off the record at 10:33 a.m.)

(On the record at 10:49 a.m.)

PANEL CO-CHAIR MORAN: All right, I'm calling this meeting back to order of the Green Ribbon Science Panel so we can continue our discussion on -- we've been really focusing on implementation of some of the recommendations or topics that have come out here, and among those, the issue of potential streamlining of getting to regulatory response or getting to AA.

And I'm looking for folks who want to comment in this area, and Ken Geiser is the first one up.

PANEL MEMBER GEISER: Okay, so this is part of a discussion, as I understand it, so I can be more discussive.

So I think one of the things that struck me listening to Gina was I reflecting back on the history of the Toura Program (phonetic). And it turns -- as I remember

it, in the seventh year of the program, we did an evaluation of the program, took -- brought a lot of people together and took a look at what was strong, what was not working, what wasn't working. And one of the big things was there was concern and complaint about the amount of time it was taking to do the plans, which are sort of a modified or more primitive version of the alternatives assessments that we're talking about today, and also the complexities. And we also were recognizing, because we had a requirement that not only did people have to do these plans, these alternative assessments, but they had to update them every two years. So this was something that was a lot of ongoing work. And we decided we needed to streamline the program, or at least streamline the framework for doing this.

So it seems like, that as we sit here today, ten years into the program, it was about at the point that -- with the Toura Program, we moved toward a streamlining and we dropped some of the framework and changed the way people could report. And some of that had to do with if nothing had changed, there was a simpler way to report and things like that, that we did try to work out.

So in my mind, it is a good time to think about it. And Gina's report or survey and all I think provides some interesting material for possibly doing that. And I would maybe encourage the program, the Department and all to

begin to think about that, particularly given the political context of new governors, and all that kind of thing like that, might be a useful thing to think about.

Of course, Tim's point is well taken. And it is, you know, hard to change the -- or hard to reconsider the alternatives assessment protocol when we really haven't done an alternatives assessment yet.

But on the other hand, Gina's report, I thought at the top of it was that pretty interesting slide in which you said, well, you know, actually, there have been -- people say there have been effects they -- you know, that already, they've changed out of certain chemicals and taken a look at the chemicals they were using and alternatives, largely being either because they were -- they're on it as a candidate, there as a potential candidate, or other things may have driven people to do that, to begin to shift chemicals in their products.

And given the way I tend to think about the success of the program, it really is dependent on the issue of do we change the market? Do we change -- do we shift chemicals in the market and make products safer, should be sort of an outer goal of the safer products part of this, of the Green Chemistry Program.

I think that one way to think about streamlining a bit, if you don't mind, is that maybe we should spend more

time in that early area where the Department decides, as you do today, that you're thinking about a particular product prioritization, that you really do call in all the major producers of that and ask for the information you need and all, and get a dialogue going on about it in the way that I think you've done with the nail salon folks, if I understood. And that, indeed, test a bit to see how much changes, even just from that, and take a look at what the impact of bringing together competitors in a room to talk about what alternatives may be on the market and what is actually possible, and then to watch. Maybe you do it a couple of times. And it's all within the framework of getting ready to do this designation, this rulemaking, which would lead to a prioritized chemical.

And it almost makes the alternative process the stick that drives the changes before you need to really drive the changes. And it turns the question in an interesting way and really looks to the leadership of firms, again, I think, of firms who use chemicals, not firms who make chemicals, but firms who use chemicals to their own innovative capacity to change. And then call that part of the program in a very proud and decent and happy way and say, you know, this is some of the effects that we're seeing. And you know, in some way it pushes all of what -- the regulatory body of the program off to -- you can always

call upon it if you don't feel like things are moving fast enough, but it becomes kind of an interesting way to think about it.

The last thing I want to do is just thank you to Gina for remembering that the program really had six elements, the Green Chemistry Program, and that I applaud you and really just, to you, hope you do say something about green chemistry education. And even though Jack doesn't want us to use the word green chemistry, I think he's on the right theme, that all chemistry should be green or all young chemists should know about toxicology and environmental fate and transport, et cetera.

So please, please, punch that out for those of us who think of ourselves still as faculty. It's really important.

Thank you.

PANEL CO-CHAIR MORAN: So as I pass this to Meg, Jack and Helen, I'll note, just as an add-on to Ken's comment about the idea of keeping the stick in the back pocket and having those initial conversations without actually holding the stick in the air, my experience is that industries, often after they make that voluntary change, really want the regulatory floor to keep out alternatives.

And that goes to Gina's point about the -- is there some way to streamline that once there's been a major

industry change, and we're just trying to get the last few players?

So we'll just go right around here, starting with Meg.

PANEL MEMBER SCHWARZMAN: Thanks. I had one other thought about this diversity of access points. And it's more of a question about what happens when what the Department described what happened with the flame retardant sleep mats and nap mats happens, which is that nobody declared they're continuing to use the chemicals, and therefore the process will not produce AAs and, therefore, there's no obvious path to a regulatory response. And does the Department lose all its levers at that point? And what can be done next? Because at that point, we've kind of missed the intent of the regulation. At least, correct me if I'm not seeing this right, if there's something else happening that you think is beneficial.

So we got out of a couple of hazard chemicals in the nap mats, but I don't know what's being used. It sounds like through the XRF work that -- research that you're doing, you're getting some idea of what's being used. But that change was made in absence of the AA process. Now, we know, because of the regulation, that they didn't at least change to another candidate chemical, because that's prohibited without alerting the Department, if I remember

the regulation correctly. No?

DEPUTY DIRECTOR WILLIAMS: There's a timing issue --

PANEL MEMBER SCHWARZMAN: Um-hmm.

DEPUTY DIRECTOR WILLIAMS: -- right? It's the day the regulations became effective. If they made that switch before the regs became effective, they could have gone to another candidate chemical. And I would say that, based on the preliminary work, there's -- there are -- some did do that switch.

PANEL MEMBER SCHWARZMAN: Which, as a separate point, points again toward the need for a class-based approach, because a class-based approach is what would prevent that.

DEPUTY DIRECTOR WILLIAMS: Which we couldn't do in the first round of products.

PANEL MEMBER SCHWARZMAN: Right. Right. So -- not, right, not that you did it wrong, but just to support --

DEPUTY DIRECTOR WILLIAMS: No, I understand.

PANEL MEMBER SCHWARZMAN: -- the PFAS work.

DEPUTY DIRECTOR WILLIAMS: We -- yeah.

PANEL MEMBER SCHWARZMAN: Yes. Yeah, as further support for that.

Anyway, it's something that I didn't know about

until you told us about it yesterday, and I'm interested to think about the implications for that, for how -- for this question of the diversity of access points, and is there a way to take another swing through nap mats that now considered -- you're saying, yes, there is?

DEPUTY DIRECTOR WILLIAMS: Yeah. I actually have thought -- again, I'm probably going to kill by staffers -- thought that we should have a trailer in our work plan saying we can follow up on any previous priority product, period, you know --

PANEL MEMBER SCHWARZMAN: Yeah.

DEPUTY DIRECTOR WILLIAMS: -- and just make sure that's the case.

This is my chance to say I don't consider -- I consider the nap mats pretty successful in terms of actually getting to the point, which is a safer product. The vast majority of products that we looked at don't have any flame retardants, so bully for that, you know?

And in some cases, I don't feel like we need to get to that regulatory response. If we continue to see a whole series of flame retardants, then I would feel more sense of urgency about it. But in this case, I do think there won't be flame retardants in these products.

PANEL MEMBER SCHWARZMAN: Do they have no flame retardants, or not halogenated flame retardants?

DEPUTY DIRECTOR WILLIAMS: Yeah, it's too --

PANEL MEMBER SCHWARZMAN: Okay. Another topic. That's okay.

So with the -- the main thing that I wanted to raise was kind of to return to Helen's point about measuring the public health impact of the regulation because it's sort of the Holy Grail; right? It's like why this was created, and is it doing what it's doing beyond our assessment of how we think it's working?

And I wanted to offer just a little bit of reflection on that, based on some other research that I'm currently doing, which is asking the same question about Prop 65, everybody's favorite chemical policy to hate on. And we're asking multiple kinds of questions to try to get -- elucidate the impact of Prop 65 on California's exposure to chemicals that are on the Prop 65 list. And we're looking at a subset of breast cancer-related chemicals and endocrine disruptors. And there's the impacted enforcement, which is easier to look at.

And the harder one that I find much more interesting is the impact of listing, and that's a parallel the SCP Program because there's the candidate chemical list and the work plan, which are intentionally, I believe, broad, are meant to kind of point -- open the opportunity to look in a lot of places, and then there's the small number

of priority products that are going to have specific actions and enforcement actions and all of that.

So there's kind of that parallel. And we are doing backflips to try to understand these sort of indirect impacts, the impacts of listing. And we're looking at things like other regulations that echo the Prop 65 list and use it as a source of chemicals of concern. Particularly, Prop 65, just to show our cards a little bit, some of the things that we're finding are that Prop 65's definition of reproductive toxicants seems to be particularly useful because that isn't -- there aren't a lot of authoritative lists about reproductive toxicants. So that shows up in, for example, Green Seal Standards, covering about 1,200 different products that certified under Green Seal now that guarantees that they won't have a reproductive toxicant listed under Prop 65 in them.

But all of these, the reason I give this detail is because we're having to do this sort of circuitous inquiry to try to sort of get at what some of these impacts are, but we don't actually know how product formulations have changed, and that's what we really want to know. We want to know how product formulations have changed, how environmental levels may have changed, and how human exposures have changed. And those are the expensive things to measure and/or the confidential business information, no

legal access to that information. That is the prior formulation information that's very hard to get for anybody, besides the people who make it. And the environmental and biomonitoring information is expensive to get.

But ideally -- but I think it's worth thinking about, is how could one get the information you really want about the impact of the regulation and whether it's -- I know there are some links with Biomonitoring California. And Biomonitoring California, which I can say because I Chair that Scientific Guidance Panel, is interested in intervention studies where you look at removing a chemical in a product from a person's environment and see how it effects levels in them. So there's potential for overlap.

But I think it's worth thinking about, especially in relationship to this assessment project, which could then say, you know, we're having to feel around the edges of the impact of this, and a more direct way of measuring it would be X, Y or Z. And it returns to some of the themes that have come up in Gina's research about inability to access sort of first-hand product ingredient information and how formulations have changed.

One of the things that we're drawing on for the Prop 65 project is CARB consumer product surveys. But there's, again, a circuitous -- you know, you have to make some assumptions about cast members in products, and then

product categories to start, because CARB just presents product categories and sales volumes for that. So it's all there, and I know the Department is familiar with those data and is working with them.

What I'm basically saying is that with the data that are currently available to us, we have to pull together such a patchwork of information to try to glean any feedback about the impact of these regulations that if one were really wanting to do this in a more informed way, one would set up different programs, and that we can make that suggestion to the legislature, et cetera.

PANEL CO-CHAIR MORAN: Thanks, Meg.

Jack, and then Helen, then Ann.

PANEL MEMBER LINARD: I just want to follow up on what Kelly was talking about, and also comment on Art.

I was involved in AB 1879 way back when. I just want to remind everybody that industry, by and large, supported it, in part, because I remember going through the A through M and saying we do this already, for the most part. I'm not going to say every company does it. But when we do an AA within an industry, let's face it, most of those factors don't change from the current product to the one we're considering, maybe without the chemical. So most of them, if they don't change, we don't address them. We only focus on the ones that will change.

When you're doing an external AA, such as we saw on the screen, they don't have that. They start from ground zero for everything, so they actually have to address all A through M, where, in fact, industry doesn't really have to within our very targeted focused alternative assessments.

But that information is -- I mean, we have the information, but when you're looking at changing a formula, if nothing changes, we're not going to go through and analyze it again. So -- and that does include, by the way, a lot of the socioeconomic factors, too, so we bring -- we know a lot of this anyway.

But I just wanted to point out that, you know, AB 1879 was supported by industry because it was very comprehensive and did do a lot of the things that we currently do anyway. And I don't think that's changed in the ten years since.

Senate Bill 258, we've already mentioned. Again, for the most part, and I know there's a few exceptions, industry came out and supported that, as well. In my case, it was easy because most of it mirrored what my product line already did, which was disclose all the ingredients, both online and on label. There's a few changes. But again, we came out and supported it, along with most of our trade association colleagues.

So again, I think if you look at it from that

point of view, a lot of the information is getting out there in a better way than it ever has. It may not be in every consumer product case, that may not be true, but it's getting there.

So again, I just encourage everybody involved, and Meredith, you and Karl have already talked to it, people are willing to talk under certain conditions, and I think it's getting better. And especially if you look at it, some industries are probably a lot better than others.

PANEL CO-CHAIR MORAN: Thanks, Jack.

Helen. Yeah.

PANEL MEMBER HOLDER: On the observation that companies were just getting out of things, out of chemicals before dates, before triggering dates, you know, we did actually talk about this quite extensively in the original regs. And, in fact, what we had proposed, or some of us had proposed, was to codify it, knowing that this was going to happen, put a constraint that if you changed -- if your replacement was not on the list, that it was simply a notification. And there was definitely some support for it, but not quite enough because, again, more progressive voices through all of the different stakeholders, kept wanting to hold the highest standard to every decision that was being made. But fairly anticipated that companies were going to do what they're doing now. I mean, this is not an

unforeseen situation.

So that would be just something, an idea, to revisit, is that is there a tweak, a modification to bring back that? It's a very minor change in some ways, but it at least keeps kind of the worst offenders or the worst changes, the worst regrettable choices to be made. At least you're sure that it's another chemical of concern. It may not have a full assessment, but is that -- if they're going to do that anyway? Because, like you said, they could today, if they changed before the date, they can use anything else on the list. And I don't think anybody really wants that. So, you know, this something.

So that kind of leads me into this question or, I don't know, just raising a question. One of the things I like about some of the European -- some of the European Commission's initiatives and regulations and laws is that they have a date that forces them to reexamine it. And I'm wondering if it might make some sense to set a target date to go back in with a set of goals to fine tune things? And I know it's really scary and -- I know, because we know how hard this is. But it's healthy, at least in the versions that I've seen in the EU, because things that are working get improved, things that aren't working get fixed. It does -- although it's hard, it actually has resulted, I think, in more robust and better programs.

PANEL CO-CHAIR MORAN: Thanks.

Go ahead, Meredith. Sorry.

DEPUTY DIRECTOR WILLIAMS: I would say that is true, and it has also, in some cases, created that opportunity for mystery. So there have been cases in the EU where that, that revisiting of a regulatory framework, creates an opportunity for people to retrench and to take a step back from the original intent of the regulation. And that has not happened just once. It's happened on a couple of occasions, and including the last year or two. And it's, you know, it's --

PANEL MEMBER HOLDER: So do you think that the risk is so high of that in this case that we couldn't have --

DEPUTY DIRECTOR WILLIAMS: No. I just think --

PANEL MEMBER HOLDER: -- some sort of goal like that?

DEPUTY DIRECTOR WILLIAMS: -- you have to go into it eyes wide open --

PANEL MEMBER HOLDER: Oh, sure.

DEPUTY DIRECTOR WILLIAMS: -- you know, that they're --

PANEL MEMBER HOLDER: Yeah.

DEPUTY DIRECTOR WILLIAMS: -- they're -- you open up the framework, either the regulations or the statute and

it can go wherever it goes.

PANEL MEMBER HOLDER: Uh-huh.

DEPUTY DIRECTOR WILLIAMS: And it's just -- but that's a risk and that's the way it is.

But I do think I agree with you, the European framework of periodic reviews of all of their regulations is really powerful. I mean, let me just say as the Department, we have stuff on the books that's completely irrelevant now. And we don't have a mechanism to systematically get it off the books. We have authorities. And somebody can always point to the Department and say you're not doing X, Y and Z. And then we have to have a conversation about why we shouldn't be.

PANEL CO-CHAIR MORAN: All right, I've got Ann. I'm going to drop in here somewhere in here. And then one of -- we can still have more follow-up. And I want to encourage those who haven't said anything about implementation or any other thoughts they have on any of these regs or questions, to start thinking about that. We've got about half-an-hour.

Oh, do you want to do a quick follow-up? Do you mind?

PANEL MEMBER SCHWARZMAN: It was a just tiny follow-on to what Meredith said of like I appreciate this tension so much about revision versus reopening. And I just

don't want to get to sanguine, like we have progressive industries here who are already doing ingredient disclosure. And we have a federal bill to completely undermine all labeling and disclosure requirements, including, you know, preempting Prop 65 and stuff, so I don't want to get too sanguine.

DEPUTY DIRECTOR WILLIAMS: Sorry, but let's just take TSCA; right? TSCA got reopened. It got improved in many, many ways. But now there's a preemption provision that never existed there before.

PANEL MEMBER BLAKE: So many things I'm biting my tongue on right now, trying to stay on the topic at hand. I guess, I mean, many, many cocktails could be imbibed and further conversation could be continued on that.

So I wanted to pick up on several things that I've been hearing. And I think it's around the measuring impacts, so it's not strictly streamlining. And then I'll say a quick thing about streamlining.

So I was building off Helen's original comment, like Tim, I'm having a wonderful day where I'm echoing Helen, about your outcome measurements and, you know, the ongoing challenge that many of us in the room have talked about for decades, which is how do you measure prevention? Prevention doesn't -- it isn't sexy. It's hard to get money for because it's really hard to show the impact you've had.

And, Meg, thank you very much for your comments about Prop 65 and all the indirect ways you're trying to piece that information together. I think it would behoove us to think about how could we measure that better going forward? And then building, also, on Ken's comment about just owning the fact that, you know, it was our intention when we put the candidate chemical -- the royal we -- put the candidate chemical list out there, that our intention was to do exactly what's happened, so how do we start measuring that?

And then the layer I wanted to add onto that is to pull in the idea about funding, is that if we can put some money around that and outcome measures on it and say these are the public health outcomes that we have achieved with this program, we need better measures but here's what we've got given the data that we have, then you've got an ROI kind of argument about how much funding you've spent on this program and how much more resource we would like, and how much more we could do to protect the health of Californians and, when we really shift the market, the rest of the country, and around the world.

So that's the piece about measuring impacts and how we could bring that back around to bring more resource, this effort.

Of course, a thing about streamlining that I think

is kind of leading into the prioritization discussion, I'd just like to point out that I think some streamlining is happening, as we do -- as we've gone through a couple of iterations of this program. And speaking on behalf of staff, you guys can feel free to kick me if I'm misstating this, but after a couple of rounds with this work plan planning, these criteria are emerging; right? Your prioritization criteria are emerging. You get to test them against real-world examples. And so I think that may actually have -- will speed us up a little bit moving forward.

That said, I think it would be really helpful for this Panel to look at prioritization. Many of us work in other areas where we've worked on different kinds of prioritization in similar spaces. So, for example, I'm with the Cancer Free Economy Network. We've gone through a particular lens of focusing on classes of chemicals across different sectors to focus on, in this case, the lens of carcinogenicity.

So like maybe a way to do that is to not bring all that to the Panel, per se, but have a little pre-digestion, you know, suggestions from the Panel of other prioritization mechanisms to look at that could inform the discussion about prioritization here.

And then finally, since I've got the tiny

microphone in front of me, also a plug for green chemistry education. And thank you, I'm one of the few that also remember that there were six blanks spaces (phonetic) in the Green Chemistry Initiative all those years ago. We do have a partner in the state, and, Meg, I'm going to jump the gun here, but in the Berkeley Center for Green Chemistry, we have a ready candidate for supporting green chemistry education and business and industry partnerships, a scalable model that Megan's been core in creating.

PANEL CO-CHAIR MORAN: Great. So I'm going to step in with a few of my own comments here, and then go back to encouraging those who haven't spoken and other kinds of comments in this last half-hour that we have.

First, I'm glad that Ann mentioned funding. I think funding is a really big challenge here. And I just want to clarify with Meredith, I understand you got six new positions authorized, but how many total positions does the program have?

BRANCH CHIEF PALMER: So if -- including Meredith on down, and all of our support staff, we'll have 41 positions in Meredith's organization. And we have some support from other organizations in the Department, certainly from Legal. And our colleagues in here are Health, Human and Environmental Risk Office, and Communications. But our core staff of scientists and

engineers is about 28 folks.

PANEL CO-CHAIR MORAN: That's a really tiny staff to get very much done. And the size of DSTC is?

DEPUTY DIRECTOR WILLIAMS: A thousand.

PANEL CO-CHAIR MORAN: A thousand employees. Okay. So just to give a scale to how small this program is, that I think Elaine said this morning, it has been a transformative force on the international scale. That's a really tiny program to get very much done, and it does much more than list products and do AAs. There's a lot of other pieces to this program.

So it seems to me that, absolutely, the bottom line fundamental, if we want this program to get more done, it needs a lot more resources. So -- and we've -- the recommendations include funding that would not go to the Department staff for other kinds of supportive programs. And that is also really important, there is no ongoing research arm, for example. That's essential. You know, one-time things just aren't going to make it. I think that's pretty clear.

The second comment I want to make is about getting from the work plan and identifying a product chemical combination. It takes years to get to the actual implementation. And during that time, we're seeing some of these substitutions that can happen, that maybe that's good,

maybe that's not good, a lot on both sides there. But what I'm seeing is a huge part of that is the requirement that I think nobody was anticipating, they have to do an individual regulation and go through that process. So that means once the Department has a dialogue, gets all the scientific information together, really frames out what the product is, then there's another year or two before you get all the way through a set of paperwork. And in a lot of ways that's redundant to what happened earlier, but at the same time, you can't start the regulations very effectively is you don't have those initial scientific conversations and really hone in on what the perfect product chemical combination is to regulate.

So it just seems to me, that's an area for exploration as to whether there are alternatives to reduce that from say three years to say one year. That would make a lot more sense. And that would also reduce the cost, freeing up resources to do other things. So the dollar per listing is high. And I know the Department is working really hard on figuring out how to streamline this process. We just learned a lot from its initial work, and so that's not a criticism but more one recognizing that that's a huge time and cost investment that doesn't necessarily bring that much additional benefit to the State of California. But there are certain pieces in that regulatory process that

would be lost that might be important, so how can this be handled?

My third comment is about data call-in. We've all been circling around the data call-in. There's a data call-in recommendation. And it seems to me that's a really important authority here in a bunch of different ways. You know, part of me thinks that once something's listed in the work plan, that there ought to be the Department's ability to do a data call-in for all of the chemicals that are on the priority chemicals list in the products that are in the work plan. Now that might be just way too much data to manage, so that's -- you know, and there's a lot of people who would be concerned about it being in the work plan, and even having those conversations.

There is also sometimes, I think, the need to figure out what the source is a pollutant, so before you even get to the work plan. Becky's work has revealed perfluorinated chemicals, as an example, all through the environment. Where are some of these specific chemicals and their precursors used? And we have some information on that, but perhaps not all the information that we would like. And that allows each product to say, oh, we're not the big one. So we really don't really know all the places that some of these chemicals are being used. And there needs to be some way to require some kind of reporting there

that is not too onerous. So that.

And then the third area is once there's been regulation in a product or the Department has acted in an area, it sure would be nice to have some kind of periodic reporting process to be able to see the effect of that. And exactly what that reporting is would really need to be linked to that specific product chemical combination.

But a Meg suggested, just getting formulation information about products at some level for some list of chemicals, say those on the priority chemicals list, would be really helpful in assessing the effectiveness of the program.

And most of the time people think about data call-in, they think about issuing a regulation, and I'll point out that that isn't always the case. So, for example, under the Clean Water Act and in California Law, there's an ability issue. They always call it a 13267 Letter, which is a section in the Code. But basically, the Board can make a decision to require a discharger to provide data. And that is an administrative process that has a high level of approval. The Board has to vote on that approval -- on that requirement. But once that occurs, the data can be required to be reported.

So -- and I would also point out that Washington State has worked with others to establish an online database

system to provide for reporting on some of this data. And so there's -- I'm sure California has been, probably, even involved in this. But it seems that there are opportunities for streamlining this on the part of manufacturers to minimize how onerous the reporting process might be in a data call-in system.

So I appreciate you all letting me say a few things here, and I want to move back to discussion again. I'm not seeing any -- so no one else has anything else to say? Yeah.

And before we finish up, I would like to let Gina in, if she'd like to say a few things or ask any additional questions.

So I've got Mark and Becky, and I really want to lean on anybody who hasn't said anything to think about whether or not they have any thoughts.

PANEL MEMBER NICAS: So first an observation. You know, if you think about it, there are so many products that could be acted on, you know, in this framework, that picking any is kind of a fast-track decision.

But I was wondering, this is for Gina, per her question, in the interviews that you conducted for the people who, you know, said that there should be a fast-track mechanism, were there any specific criteria offered as to which ones, you know, how you would decide which

particular -- how, let's say, you know, the agency that had the authority, how it would decide which ones should leap straight to the alternatives assessment stage? You don't want to skip that, so let's say if you're going to skip the preliminary stages, how would you decide which ones would deserve that sort of fast-track approach?

DR. SOLOMON: Well, some of the types of quotes are actually on this slide, though I had to redact. I had to shorten them a fair amount to fit. And I have, actually, quite a few more that will be in the report showing sort of different approaches that were suggested. But, you know, the -- one perspective was the quote of, you know, if you can get that razzle-dazzle effect and some other without, you know, the chemical, or you don't need that razzle-dazzle effect at all in a product for its function, then, you know, those would be candidates for sort of skipping.

And I'm actually chewing over, Meg, one of the comments that you made where you were proposing that some things might skip, just skip to the AA, versus other things that would skip all the way to a regulatory response. So I thought that was kind of intriguing. I'm going to be thinking more about that. Because in a lot of cases the people I spoke with were just sort of saying, well, you know, is there -- maybe we can just kind of skip, you know, move forward more quickly in certain cases, but they weren't

very specific about which phase of the process could be skipped, the pre-regulatory, the, you know, the initial reg, the AA, the regulatory response. They sort of sometimes bundled that. So I'm trying to now tease those threads apart and think about more concretely, what could work? Which is why this conversation is so useful.

PANEL MEMBER NICAS: I assume -- I'll just make an observation that I don't think that actually, well, of course, the razzle-dazzle thing sounds nice, but, you know, I mean, we really have to get down into specifics. And so like an essential question would be: Would you want to act and fast track those things that have more immediate effects, like methylene chloride, which we know are going to kill people? Now how many people is it going to kill? Well, okay, it's not going to kill that many, okay, but there are going to be some deaths.

Or would you spend your time on some real-based population exposure which will end up with an increased cancer risk over the broad population. Well, they're not going to happen tomorrow and they're not going to happen next year, but they'll happen down the road.

So, I mean, that's the kind of tradeoff I'm thinking about in terms of fast tracking something, that you have to sort of think about the general population exposed and when you're going to see these toxic effects and what

they are, you know? And so I don't think it's -- I don't think it's an easy -- I don't think it's an easy decision making process.

PANEL MEMBER SUTTON: I just had a couple comments. I like Kelly's discussions of the data call-in. And I'd like to see more work in that area, where it's under your authority.

But another thing I wanted to call attention was all the work you guys have done to ask for and make known the kind of information you want, partly through these workshops and stakeholder interactions, but also in my world it at your presence at conferences. We're going to have this Society of Environmental Toxicology and Chemistry Conference here in November and you guys are going to be out in force. So it's a really great way to reach out to both industry and the scientific community to let everyone know, this is the kind of data that's really going to inform our regulation and our work going forward. So I just wanted to complement you on that ongoing effort.

Then in terms of -- this is something that Gina brought up, great, great, talk -- the selection of priority products, I'm an advocate of the current jump-around approach. You know, there are a bunch of thoughts about how one could hone the process for choosing these priorities. And I really like that you guys have taken a lot of

different approaches. Some of yours have been, I would say, low-hanging fruit. But the sick antelope is very -- a great metaphor that was made to me. Some of your priority products are going to have really tricky alternative, you know, maybe no possible alternative, who knows? Some are focused more on human health, some are on ecotox.

So I really appreciate that you've taken this broad look. But I do want to note, it can sometimes limit the efficiencies it could develop if you honed in on just one or two of these approaches.

And then, oh, yeah, last little point, small point, but CalSAFER is so great. And the TIC is not. So I really like CalSAFER. It's great.

DR. SOLOMON: And getting better all the time.

PANEL CO-CHAIR MORAN: Thank you, Becky.

So I've got Meg and Mike. And then maybe I'll offer Gina a chance to say a few words and see if there's any last thoughts she wants from us. We need to wrap up at a quarter 'til.

PANEL MEMBER SCHWARZMAN: This is just a small point that I had made a note of during Gina's presentation that we haven't returned to as a Panel, which is one of the things that you called out among the responses were -- there was that one very clear statement from a business person about how impossible the economic analysis is in

alternatives assessment. And I just wanted to return to this because we were talking about it a little bit yesterday and I had a proposal that might be far out, but I wanted to link to this idea which is one of those costs is easier for government and very hard for businesses, which is the cost to government agencies. That's one of the things that's stipulated; right? And maybe that's some guidance that the Agency could give to responsible parties, what common agencies are bearing the costs and what some of the costs are.

But then I started thinking about what kind of guidance could we give companies about some of the other public health costs?

Wasn't, yesterday, there a conversation about -- oh, maybe this is something that Karl gave in his update about the workshop that you had about looking at like accounting for public health costs through air pollution. We certainly have more data on that for air pollution because the associated health effects are better known. But there is some European literature about economic impacts of endocrine disruptor exposure, and you're probably familiar with all this literature. But obviously, you're already making an effort in this direction because you're holding workshops like that.

But I guess I would just support that and say,

since we know this is an area that, as we see it, the analysis has fallen down and businesses themselves are saying this is a really heard area to do, just to support your ongoing work in providing as much input as possible to the process in those areas that we expect to be underdeveloped in the AA process.

And it's wonderful to hear from Jack that that's a very familiar part of an assessment to unilever (phonetic), at least, is some of those more like public health impacts. And so perhaps there's even some industry best practices, roundtable stuff that could happen to -- or maybe they have to be confidential conversations, or something about how folks who are considering this are trying to pull in that information and do that accounting. I'm just in support of that.

PANEL CO-CHAIR MORAN: Thanks, Meg.

So moving quickly, I've got Mike. And, actually, I'd like to throw in Jack before we go to Gina.

PANEL MEMBER CARINGELLO: I'll try and be quick. I just want to kind of reiterate what Meredith said, is I want us to be aware that with the mattress pads, that was a big success. You know, I view that, if we look at what we -- what was done here, it's about safer consumer products. It's not about the safest, it's not about no consumer products, it's about safer. And there was a stepped change

in that area based on what the Department did. Now, could there be additional step changes? Absolutely. But I think what gets modeled here is we're focusing a lot on the end part of the process, on the AAs. But to me is also a very effective part of the process is developing the work plan. Because when the work plan comes out, you're not to the point of a specific product with a specific chemical, necessarily. You're with a group of products with a group of chemicals that the Department is going to start to look at, and that's when industry looks at what the activity is going to be.

So if you kind of go along, what Helen was saying was, okay, maybe you have an off-ramp that says I'm going to remove this and I'm not going to add a chemical of concern. But maybe it's even as simple as you get your off-ramp if you're going to remove the chemical of concern and you're not going to add any of the ones we were considering on top of it to replace, you know, then you've created more definition. Because I think what's lacking is some definition on some of these fast tracks. And maybe there are ways to do it that provide a continuous improvement, because you're never going to get perfection, step one, but if you get continuous improvement, that's a pathway to go.

And I think the work plan crafting has been very well done. And that's, I think, where you come with the we

don't have any AAs now to work on because the Department has crafted well-considered work plans and gotten the data out there, and then dug public outreach and discussed what's in the work plan, discussed what's going to be a priority product, and kept that iterative action.

PANEL CO-CHAIR MORAN: Continuous improvement.

Jack?

PANEL MEMBER LINARD: Just a quick point. We've mentioned reach a few times, REACH, obviously, is all-encompassing. But I just want to point out that in terms of chemical management, the Canadian system, in our view, is far superior. In fact, I tell my European colleagues, REACH was actually based on the Canadian Chemical Management Plan, which they don't like to hear, but it was actually done really well. They prioritized very strictly and then followed through in a very definite time table.

So I would encourage you to look at the Canadian Chemical Management Plan, managed by both Health Canada and Environment Canada, as a model for prioritization, because it's really worked well. And I think industry has contributed a lot of safety information in support of ingredients that were prioritized.

So I'll leave it at that.

PANEL CO-CHAIR MORAN: So now I'd like to offer Gina and opportunity for any remarks or questions that we

might address in our last ten minutes.

DR. SOLOMON: Wow, so much valuable information, so many good thoughts and ideas, so thank you all for the discussion. This was really, really useful in both validating some things, and then also making me sort of rethink a few things and sort of honing some of the thoughts.

So I do also want to make -- say that I'd be very happy to have like any follow-up conversations. So if any of you want to just talk more or have ideas after you leave this room, feel free to reach out. We can hop on the phone or sit down and talk more, because I am still actively trying to tweak my ideas.

I think, you know, there is this funny tension, even in the discussion just now, about the indirect regulatory impacts of the program, which I'm sort of hearing, and I heard in the interviews, also, are probably quite significant, and how important that is. And there were even people who said the program should move -- should put out a lot of sort of flags out there, should, you know, name a lot of potential priority products, but then shouldn't rush to get them across the finish line. Because, in fact, that very, you know, sort of drawn-out process is valuable in sort of getting -- you know, allowing all this innovation to happen.

But then, of course, there's -- we also talked about the fact that a lot of that does happen behind the scenes then, and it's not visible. It's difficult to measure. And there are certainly, and I can tell you this for sure, lots of folks out there who don't really fully believe it's happening if they don't see it.

And so then -- and then on the flip -- you know, on the -- and then also sort of in this set of considerations is the, yeah, but if you, you know, if you rely on the indirect, then the alternatives analysis, which, you know, as Karl pointed out, is the cornerstone of the program, it actually ends up being sort of, you know, an appendix. It's not really critical because in most cases there are off-ramps that are being taken.

And so there's this set of tensions right in there that is a bit of a tangle. And so, you know, if anybody has additional thoughts on that?

There are certainly people, you know, the people who, you know, wanted to drive everything through the alternatives analysis, want to do that to maximize transparency and to really try to stick with this idea of avoiding regrettable substitutes, and I get that. You know, there's -- that's a valid way of thinking.

But also, another valid way of thinking is to say, okay, let's, you know, let's get innovation happening behind

the scenes and all kinds of changes will occur. But, you know, is that really the way we want to go?

So I'd love to hear just a little more about that, because I'm struggling with that point in particular.

PANEL CO-CHAIR MORAN: Tim. Meg.

PANEL MEMBER MALLOY: You know, I was thinking about that, too, especially I've never been a complete adherent to the notion of this self-regulatory thing, because I think a lot of it, because it happens in the shadows, there's a lot of opportunity for strategic behavior and whatnot, but it does seem to be a real thing. And what strikes me is, I think this ties in with the information call-in authority so deeply because -- in two ways.

One, if you're going to be having those kinds of interactions with people, pre-regulatory, it would be useful to come to the table with a lot more information. The only source of information in many cases is what they're willing to tell you in those discussions, and it's difficult to confirm whether that's true or not. So how can you call an authority or some kind of information authority, I think, would better prepare folks for having using that pre-regulatory period. But also, perhaps more importantly, having that authority would also allow you to measure whether you're actually having an effect or not.

So it would be nice before everything starts to

know who's using what and for what purpose. And then to be able, afterwards, to go back and find out who's using what and for what purpose to really measure if there's been a change.

So I agree with you, Mike. I think it's a success story, maybe. It depends on what they did; right? So the whole regrettable substitution thing casts a shadow on whether it's a success story or not. So information, I think, is key to making that real and measurable. And, you know, and I think about the -- what kind of reforms and this whole debate about regulatory versus legislative reform. And, of course, the real danger with legislative reform is like once you open it up, you don't know what you're going to end up with. So I think there's good reason to be cautious about that.

But like when I think about it, I think, you know, information -- my thing would be think about how to be more creative with the authorities that you do have. That would be an interesting thing to look at in an evaluation. And then try and get more authority. Because I think of all, maybe besides funding, of all the suggestions about legislative changes, getting more information collection authority or generation authority, I think, is key to this program.

PANEL CO-CHAIR MORAN: We have Meg and Ken.

PANEL MEMBER SCHWARZMAN: I really appreciate everything that Tim just said. And the place that I would go with this is to notification, that maybe, Gina, you kind of outlined two extremes purposefully to provoke our thinking, I think, but that perhaps there's something in the middle that lets the indirect impact happen, but also feeds some information to the Department. And that would be, in my mind, actually, a relatively simple notification provision, like what Helen was talking about, the kinds of things that we discussed years and years and years ago, but that probably was not as easy to see how it would work as it is now, that comes into force early, early in the process, like work plan timing, or something like that. It's a simple notification. Are you using this as of the work plan or not?

And then at the time of -- I don't know. Would -- I haven't thoroughly thought this through, but there's something about collecting some baseline information, like Tim was just talking about, who's using this in these product categories, and later point-in-time information. But that's a simple notification that doesn't go quite to the level of authority of big, far-reaching data call-in, which, of course, I would love, but is maybe less realistic in terms of requesting increased authorities.

PANEL CO-CHAIR MORAN: Thank you. Those are very

creative suggestions. And I think -- Meg, do -- or, Meredith, do you want to weigh in before we go to Ken?

DEPUTY DIRECTOR WILLIAMS: No. I'm all right.

PANEL CO-CHAIR MORAN: Okay. So we're going to wrap up the last of the Panel input on this topic with Ken Geiser. It's very appropriate.

PANEL MEMBER GEISER: I don't know about appropriate. It sounds like the end of the road or something.

Well, I just, I mean, of course, my colleagues Megan and Tim, I wouldn't necessarily call that self-regulation, because I think that does -- I have my own problems with self-regulation, as well. But I think what I was trying to capitalize on was the capacity within -- that the law allows the Department.

And the Department actually is practicing in calling people together about developing the information and finding out what the alternatives are and all, and really taking that out there toward the kind of sectoral programs that we are seeing spontaneously, and that's the wrong word, arising in various sectors, like the textile sector or the electronic sector or the office equipment sector, or even the auto sector, where there's dialogues going on that are really about alternatives and people sharing information and all of that. And it's a low-cost kind of thing in the sense

of legal costs, and in the sense of having to meet areas, legal standards and stuff, but it would be a way.

And then, as Meg is sort of doing, is sort of assess what the impact of that. Say that the message the Department is -- this is a priority area that we're thinking of. We want to spend nine months working with the firms to see how far we can get in developing alternatives, working together and all. And to the degree that we are headed for some serious rulemaking in this area, we may be only having to make those rules for the laggards. Because, in fact, a lot of the leaders moved during that time, or at least have the dialogue and the market is shifting and, therefore, you're in such a much better position to do the work.

Now, it's true, your point is well taken, that, gosh, we did all this work on getting the protocol for the alternatives assessment worked out. Is that -- is it just some kind of weapon now, you know; right? I would say, no. I would be kind of doubly cute about it and during that information gathering, seed those discussions with here's a clever way to do your alternatives assessment. And, you know, and also, that people are actually doing the alternatives assessments they're not really required to. But anyway, it would just be some very -- I think some really open and interesting areas.

You're right, I have colleagues in the NGO

community in California that probably would find that distasteful. But I basically think there's a lot of productive space here, and I urge the Department in -- God, now can I make a closing statement? -- in the future as you move forward in what is truly a successful program, that these are the kind of out-of-the-box thinking that I think is really going to drive it, so, good.

PANEL CO-CHAIR MORAN: Thank you very much, Ken. And I don't think I can say anything to improve on that.

So I would just like to thank Dr. Solomon and her team for getting the funding and conducting this review, and having the dialogue with us.

I want to thank the Panel Members. This has been a little difficult to Chair. I think there's a lot of energy and useful stuff here. And I appreciate your patience with me and your thoughtful input on this.

And I want to thank the staff. It's a hard thing to go through this kind of review and think about all of those things. And so I, you know, I appreciate the approach that you all, and the whole team, are taking on this. It's not a critique of you. It's really a thoughtful process about supporting the program and taking it to the next level.

And I also really want to thank the AA team for their incredible patience. We're still waiting on one final

presentation from Heather Lee, and one last little discussion before this meeting adjourns at 12:30.

So I'm going to turn it over to Art for the next steps.

PANEL CO-CHAIR FONG: Thank you, Kelly.

As Kelly mentioned, we have, you know, two final agenda items for the last 45 minutes, starting with a presentation on the Preliminary Alternatives Analysis Template. And then 25 minutes for panel discussion. And then the last couple of minutes with closing remarks. And Kelly and I will go over some of the action items.

So, Heather?

DR. LEE: Hi everyone. My name is Heather Lee. And for this portion of the meeting, I am presenting the Preliminary Alternatives Analysis Report Template.

First of all, I would like to thank you all for the thoughtful advice and suggestions over the past couple of days. It was very insightful to hear.

The goal of this session is to get your feedback regarding this first iteration of the template. Hopefully, you've had a chance to look it over. If not, it's provided to you in your packet.

So first of all, you can find the template and other useful resources on our website under the Alternatives Analysis Resources. I know when we talk about alternatives

analysis, it can seem a bit overwhelming at first. So to help stakeholders with the process and from the recommendation of the GRSP Members, we created this template. The purpose of the template is to help responsible entities organize and present their report to fulfill the regulatory requirements.

Before we go further, I want to highlight that the template is not intended to be a standalone guidance document. We previously released the AA Guide, as shown here on the right. That contains detailed guidance on how to conduct an AA. It's critical that the responsible entities read the regulations and become familiar with the AA Guide before using the template. And it's also optional for stakeholders. They can use this template or any format of their choosing.

As a reminder, the AA process consists of two stages. The first stage is the screening and scoping phase where the responsible entity identifies alternatives that warrant further consideration. And the second stage is where the more in-depth analysis of the alternatives selected from that first stage is conducted.

Once the responsible entity completes the first stage, they submit their results in a preliminary AA report to the Department. And the template we created only pertains to this first stage AA.

For the second stage, the RE presents their findings in a final AA report, using any format of their choosing. As a note about the final AA, we want the responsible entities to be able to present their decision making as they see best fits their needs within the framework of the regulations. And at this time, we do not intend to create a final AA template as the flexibility of the regulations makes it challenging to create a template that would not limit that flexibility.

So here's a closer look at the template. This is an abbreviated table of contents.

There is an Executive Summary, and the first two sections are related to contact information.

Section three is the priority product information. This is where the function, performance, and legal requirements of the priority product alternatives are discussed.

In section four the scope of relevant comparative factors. Here we ask the responsible entity to go through the factors, exposure pathways, and lifecycle segments and determine which are relevant for evaluation and comparison of their priority product and alternatives. And for any that they determine not to be relevant, we ask them to explain their rationale.

In section five the responsible entity describes

the alternatives considered and explains the rationale for those alternatives not selected for further evaluation.

In section six the responsible entity describes which alternatives were selected for further evaluation in the second stage.

And section seven is the work plan for the Second Stage A.

Now the challenging part that we found in creating the template was trying to create a useful document for our stakeholders, while being careful to accommodate the flexibility of the regulations, and at the same time making sure not to create any standards of general applicability that would constitute underground regulation.

So with that, we would like to take this time to let the Panel discuss the template, and we will take your feedback. Here are the questions we posed to the Panel. Please feel free to comment however you find most appropriate. We welcome your suggestions and hope to learn from you how we can improve the template. We will use your feedback, and also feedback from responsible entities that actually use the template, to iterate and improve the design in future versions.

Thank you, and we look forward to your comments.

PANEL CO-CHAIR FONG: Heather, thank you very much for your presentation.

Let's just see if there are any clarifying questions for Heather, before we just into providing our input. I don't see any.

Let's open up the floor for input and discussion on the template.

We'll start with Helen.

PANEL MEMBER HOLDER: Hi Heather. As a person who makes a lot of templates, I have to say, good start, because I know that for those of you who don't live in this kind of world of making forms and whatever, you're probably going, what? Because all you're doing is asking for who this is. You know, I've got to tell you, even just that really baseline stuff is going to help you sort through these files much, much faster. So it doesn't seem necessarily like you've got this density or guide or whatever, it's actually very helpful.

So -- but here's what I will say, is that some gaps or suggestions, maybe, is that in the factor detail section, right now you just list the section and you're like -- and it's like a narrative form. One thing that you might find to be helpful is tick boxes at the beginning of each section of which factors you are including or excluding, however you'd like to sort it out. Because if you have to dig into the text every single time you hit a section, you will find yourself really inundated. It's a

very easy fix. It's not -- it's definitely not an underground regarding, it's just taking it to that level. And especially in the cases where you've got many, many potential factors in a category, you're going to find that to be, I think, a helpful thing.

And then I think the other question you had was whether it's okay to not have the final template. I suspect you will eventually want one. But if you want to wait on that one, I think the preliminary is the more urgent, obviously, of the two, since it's earlier in the pipeline. Again, having some experience in getting lots of different test methods and ways of articulating the results, I strongly suspect you're going to want final, even -- you know, but if you want to cross that bridge later, that's fine.

PANEL CO-CHAIR FONG: Thank you, Helen.

Mark?

PANEL MEMBER NICAS: I think that some of the relevant factors maybe need to be reordered. I mean, sort of just -- you start out with adverse environmental impacts and adverse public health impacts and so forth, but those are going to follow from what you know about environmental fate, right, and which follows from physiochemical properties. So, you know, just more like a logical order to think about, well, okay, here's this stuff. Okay. How much

of it? How much is getting out? Where is it going to go? And then exposure factors, how are people going to be exposed to it? Which leads to, then, what you're thinking the impacts are, you know, in terms of public health impacts and ecological and environmental impacts.

So I'm not saying the factors were wrong, I'm just saying they kind of should be reorganized, I think, in the way that I think about it. No. How about that? Okay.

And just one other comment. Actually, this came up when I asked about it yesterday, you know, how much of lifecycle analysis is, you know, required in these alternative assessments? And I remember Meredith saying, well, it's lifecycle thinking. But this alternative -- this preliminary alternatives' thinking has a lot of thinking in that lifecycle analysis here. So I'm kind of wondering whether you're actually looking for that level of detail in this sort of proposal?

PANEL CO-CHAIR FONG: Thank you, Mark.

Mike?

PANEL MEMBER CARINGELLO: So I also think this is very well done. I think it gives people room to think on a preliminary basis, which is where you want them to be.

The one thing that kind of drew my attention was when you get to the selected alternative or alternatives is that by giving that latitude already in the preliminary

analysis, if they can just say, oh, here's the alternative we're going to evaluate, have you gotten to a foregone conclusion of here's what we're going to do? And now we've got here's what we're using now. We can't have that. So here's the one alternative we're going to consider going to the final AA. Do we really want that? And I don't know if it's wrong or right.

That would be my concern, is there might need to just be some discussion within the template of if you've only got one alternative, you need to have some really solid information to us as to why there's only one alternative, or if you only have one alternative, please have a discussion with DTSC so we can give you some other ideas to think about. Because, I mean, I think we've heard a lot that, okay, people are just picking an alternative and going with it, and there are better solutions. So that would just be the fear I have with the way it's written right now.

PANEL CO-CHAIR FONG: Thank you, Mike.

Kelly?

PANEL CO-CHAIR MORAN: Thank you, Chair.

And I want to thank the staff. And we keep asking for these kinds of things, and I'm very pleased that you all are responding and trying to think through what that balance is about being too prescriptive and being -- but not, you know, being open enough on these things.

I'm thinking about this from the point of view of being someone reviewing them. And I review a lot of pesticide risk assessment. So part of my job is to look at the ecological risk assessment for every pesticide that EPA reviews and say, you know, have they missed a pathway that's important for the area that I work in, which is urban runoff and wastewater discharges. And the consistency in format of those risk assessments is very helpful because then I know where to look and my review goes more quickly.

I'm expecting that when DTSC gets an AA, it's going to have an interdisciplinary team of folks who are going to be reviewing them, because no one reviewer is going to have all the expertise to say where are the gaps, what's missing, because so much of the science review is a gap review. And so I guess I would ask you all to give a little thought about encouraging people to have some consistency in format, perhaps at a little greater detail level than is here.

The other way of dealing with this is where Helen was heading with the checklist. There are certain things that I use that are really important for me to quickly scan through things. And one of them is that -- and you might just take a look at EPA's pesticide risk assessments. They have a very standard format in the ecological risk assessment, in the human health risk assessments. There are

horrible, ugly documents. And when you go to it, I can help you guys find an electronic docket with some examples of these things, but you go to the docket and there's 12 different things that together comprise the risk assessment, so it's a real pain in the butt to look at them.

But what they have done is use some standard tools and formats to help organize things and make sure they catch everything, and that's exactly the goal of the template, is to try to make sure that we catch everything, and to facilitate the review.

So in the ecological risk assessment, I look for -- there's a summary table where they put the -- summarize the environmental fate and data all in one place so that, you know, chemistry, environmental chemistry, environmental fate, all in one place, always the same order with the same things that are listed. And as soon as you scan through that you can say, oh, this stuff is going to land in air, this stuff is going to land in water. I mean, you can do a pretty quick review. It's going to decompose quickly, therefore I need to think about the degradants. It's going to be mobile in water or not. That table is just so crucial to focusing the reviewer's effort.

The second thing that I use, just every time, and I feel like I'm the broken record on conceptual models, but it's the conceptual model. And, I mean, that's why I keep

bringing up the standard conceptual models as a tool packet and the ability to start with what EPA did for TSCA and fix the mistakes in that and, perhaps, provide that to people.

But the conceptual model also really quickly allows me to see if there's a mistake. So there's a pathway they didn't realize. That means that they roughed out as a relevant factor. For me, it's something about water quality. So, oh, they didn't understand that this stuff falls on hard surfaces and runs into storm drains and gets into creeks in minutes instead of weeks. So they missed that whole pathway, and therefore they missed that whole impact chain, and therefore they weren't thinking about aquatic toxicity.

That happens to me all the time. You know, I'll open up a risk assessment and I can look through and very quickly find the gaps in the conceptual model that caused, then, the mistakes and the risk assessment. But that's the purpose of the public peer review, and that's the purpose of the Agency peer review.

So that's just -- the other area would be, so thinking further about tables and checklists that might facilitate DTSC's review, particularly thinking about how you're going to break up and do that review process when you get the AAs. So what skill sets are going to be the different representative ones on the team? Because clearly,

you'll have some people who will look at the whole thing, but you're going to need to parse that out. And anything that you can do in the format that helps facilitate that, that will save you money in the long term.

So that's food for thought, and thank you again.

PANEL CO-CHAIR FONG: Kelly, thank you very much.

Let me go to Tim, and then come back to Helen.

Tim?

PANEL MEMBER MALLOY: Thank you. I just thought this was really thoughtfully and carefully done, so I think it's a really nice template. And I just had a couple of short comments on it.

One, I think Kelly should stop calling the conceptual model thing a broken record. I think you should think of it as one of your greatest hits; right? And who doesn't want to hear those?

And, no, on this, I just had a couple of minor, I think, kind of comment.

One is I like the idea that in the kind of little bracketed areas, you referenced the AA Guide to kind of send people back to that. And I would encourage you to do it some more. Like it's in the scope of relevant comparison factors. You might think about putting it, you know, like in the alternatives considered area because I think that's helpful. I mean, there's always this tension in a template

between wanting to just be structural, but at the same time wanting it to have a substantive component to it because you're also structuring how people think about stuff. So I think having the click-over to the Guide is really great. I would use it a little bit more.

And then the other thing I would just say is there is something in the regs for these consideration of additional information beyond the relevant factors. God forbid we should add more things to it, I know. But it does like encourage or allow people to consider other things beyond and, in fact, to consider things that they would normally think about in the second stage AA. And I didn't see it in here. I may have just missed it. But it might be helpful to somehow get that built into here, as well, maybe not so much because you want people to be looking at the other things, but as a trigger to if they are thinking about other stuff, a reminder that they need to identify that, as well.

So that's my only comments. Thank you.

PANEL CO-CHAIR FONG: Thank you, Tim.

Helen?

PANEL MEMBER HOLDER: Right. There was one section that I was particularly interested in, and I'm sorry I didn't mention it before, is the work plan. This is one that, when we did our internal pilots of this, we really

struggled on this section of what exactly you're kind of looking for. So I know that this is not the final version of what you're going to want this section to be, but I will kind of commend you for at least putting a stake in the ground. And, you know, as you get farther in, I am going to be watching this one.

Now, if we keep it as simple as this, that's actually terrific, by the way. It does not have to be elaborate or whatever. It's just like I'm going to do X and Y and Z and it's going to be done by this and that. And this is what I'll know at the end. If we can keep it simple, that's better.

But that work plan section, I don't know that people appreciate how tough it is because the final is not -- it's not structured. And so I could go in and say anything. You know, I could say my action is I'm going to do the hokey pokey and I'm going to have that done by next week. And then whichever -- you know, if my -- what is in this box, I'm going to use that alternative. And there's nothing, technically, that says that that's not compliant.

So but we definitely did have -- I know we tried this a couple of different times. And I made my team iterate through some variations on this. I anticipate you needing to do a little bit more is my guess, is that it will need a little bit more, an example or a something.

PANEL CO-CHAIR FONG: Helen, thank you.

Meg?

PANEL MEMBER SCHWARZMAN: As usual, Helen is speaking, I think, about something, which I appreciate.

Just to elaborate on that, from my experience in our Greener Solutions Program, our class where we've, based on our past experience, implemented an early presentation within the class that we just did last week, so that's like the third week of classes or something, where the students are presenting their understanding of the topic so far and their challenge.

And the most important piece of information that we get from that is their last slide where they say these are our remaining question about this challenge. And that's what really tells me they understand what they're dealing with, they know what questions they have to answer. They know, you know, what resources they lack. Like they can't have figured it all out by then, but they've learned enough about the topic that they know what their questions are.

And I kind of see this -- or that's at least a piece of the function that this serves, and so I wonder if there's a way to even specifically kind of call that out, of like what questions do you need to answer to be able to complete a final AA?

PANEL CO-CHAIR FONG: Thank you.

Let me see if there are any more comments or input on the preliminary AA Template.

Seeing none, so we'll let -- (indiscernible) in terms of going into the meeting closeout.

At this point, I'm going to ask Meredith to -- for her closing remarks.

DEPUTY DIRECTOR WILLIAMS: Thank you. This was our most ambitious GRSP, at least since I've been in the Department. And we weren't sure we could quite pull it off, but it was a lot to digest. We gave you more reading material than we normally do. Everybody was prepared, thoughtful, insightful, and gave us a lot of very valuable information.

The reason this -- we could do such an ambitious meeting was because of Staff. Staff, first of all, I don't pay any attention to the logistics anymore, and that's because the team has -- they've got it dialed in, everything works. I just, I don't lose any sleep over it. And so I just want to thank all the folks who've made that happen, one of whom stepped out of the room, one of the key folks here. And so thank you to everybody. We have a great system for getting volunteers from across the program. Whether or not your area of the program is on the agenda, people step up and contribute, and that's very helpful.

I am going to single out Anne Cooper Doherty --

(Applause.)

DEPUTY DIRECTOR WILLIAMS: -- and I know the Co-Chairs would echo this, just for her thoughtfulness in terms of thinking in challenging ways about what we're trying to do, and also being a very nice terrier to get me to keep moving on pulling together the materials. So I just can't thank Staff enough, and Anne Cooper in particular, for all their contributions to make this a successful meeting.

As always, the Co-Chairs, you were really game this time around. And I think that early on you were a little skeptical about a couple of the things we were proposing, and not quite sure it was going to work out. And I think that -- I think that helped us go back to the drawing board a couple times and reshape our thinking, and I think it paid off tremendously.

And as you acknowledged, Kelly, this was a tough one to facilitate, this morning's conversation in particular, just because so many -- where do you go with it? And you guided it expertly, both of you, and so we got, I think, as much as one could possible hope out of the meeting. So thank you very, very much.

(Applause.)

PANEL CO-CHAIR FONG: Well, at this time, I'm going to ask Kelly if she has any action items she wants to highlight for us?

PANEL CO-CHAIR MORAN: Yeah, I do have a few. Gina asked for any follow-up from us. And I'll let the staff email -- send out her email address to the Science Panel Members. And I'm suspecting she needs that quickly. So any contact and any conversation within, say, the next two weeks, is that -- all right. So just to light a fire under you, if you have additional thoughts, make those notes on the way home and -- yes.

PANEL MEMBER BLAKE: Could we flip that around? And also, I'm not going to offer all of us, but feel free to contact us, as well, if you have specific questions you think individuals on the Panel would be helpful with.

PANEL CO-CHAIR MORAN: Yeah. So that's just, that's one action item. I'm expecting, based on the conversation and decision making and the items we came up with, that that will come back in a future meeting. And I particular want to thank Tim and Mike and Mike's colleague from Method to spending so much time preparing for that and supporting the staff and being just so wonderful in that rather difficult discussion to facilitate, but really important thing.

I, on the AA evaluation update, I really want to reiterate the, I think, strong recommendation to see that get published in a peer-reviewed journal. And more generally, to be looking towards making that an element of

the program design. So last time, you know, we've come and recommended you get your folks to conferences, and you've done a really excellent job with that. And I'm hoping that will continue in getting around the nation and the world. And I think Elaine's comment shows that you've been doing that, and how important and effective that has been for this program and for the State of California. A small investment is really paying off in a really huge way in terms of our impact.

I know there were a ton of other things that came out of all of these discussions that the staff are going to be following up on, so I'm not going to attempt to even begin to list those items. But I'm sure that we're going to see those pop out in various ways, most of which won't involve coming back to the Panel, but a few of which might.

And I want to encourage the continued action on the part of the Panel to support the staff. This all happens behind the scenes. But I know that various folks have done different things individually when the staff is reaching out and they'll follow up on a specific request, or answer another question that they know -- ask you another question that you know they have expertise. I've personally been following up on the Panel's recommendation to work with the Department and other agencies to see what we can do to get more environmental monitoring data, particularly the

water quality monitoring data. So that's a particular piece that I've continued on. But I know that other folks have also been continuing on these kinds of things.

So I want to acknowledge and thank you all for your individual support outside of these meetings for the Department. That's really, really important. And then both for that, and in your participation here. It's a big effort and a big contribution to our state and to our state's future that you all are making by donating your time, your unpaid time, to come to these meetings and help make this program successful.

So I really do want to thank everyone here, including the staff, who, although you are paid, I think you are doing something that's very unique and requires going the extra mile. In a lot of different ways, it's much harder than a regular job. So thank you, everyone, for making that contribution to California's future.

So with those remarks, I know Director Williams has something else to say. And I'm sure Art will have some words in closing.

DEPUTY DIRECTOR WILLIAMS: I was quite remiss. I did not thank our speakers, and I want to thank all of our speakers from Staff, from the Panel, and Ryan who -- and especially, this is the first time we've had external speakers, so thank you, Gina, and thanks to Ryan Williams

for his participation yesterday. Again, asking you to prepare, on top of everything else you have going on, is a very heavy lift, and so we really appreciate it. And I'm really proud of Staff and the presentations they've put together.

BRANCH CHIEF PALMER: Yeah, we should say something.

DEPUTY DIRECTOR WILLIAMS: February or March? I don't think we want to -- you haven't -- we have to look. Because the Panel was kind enough to give us all of their typical meetings that they attend and what those schedules are, we'll cross-reference that list, that master list we have. We'll also try and see if there's another Climate Summit happening and avoid that.

BRANCH CHIEF PALMER: We'll see you all at the AA Symposium, of course.

PANEL CO-CHAIR MORAN: Yeah. Yeah.

BRANCH CHIEF PALMER: Yeah.

DEPUTY DIRECTOR WILLIAMS: So -- but we haven't done that legwork, and that's why I wasn't prepared to propose any dates.

PANEL CO-CHAIR MORAN: But we are anticipating the next meeting of the Panel to be in the Winter-Spring of 2019?

PANEL CO-CHAIR FONG: I see Ann wants to make a

comment.

Ann?

PANEL MEMBER BLAKE: So it's just a suggestion that came up from some topics, talking to some other Panel Members last night and this morning. We've talked about our global impact of this small but mighty program. I think it might be helpful -- there are two Panel Members, and forgive me ahead of time for volunteering you, who have presentations that I think would be useful, or work, ongoing work that would be helpful for us to put us in the global context. Helen spoke last night about a prepared talk that she has on hand about global trends that I think would be interesting. And you prepared that for HP.

Do you want to say a titch more about that? And, you know, it's obviously up to all of you as to if that's a good use of our time, but I think it would be a helpful context.

And then the other one is Ken Geiser is ramping up work on a U.N. Global Chemicals Outlook Report. And I think it would be really interesting to hear about that, as well. So think about that in your future agenda.

PANEL CO-CHAIR FONG: Yes, Meg?

PANEL MEMBER SCHWARZMAN: I think that it's been said generally in the thanks to Staff, but I feel like our participation in this Green Ribbon Science Panel meeting was

so facilitated by the specificity of the input that we were given. And I just wanted to acknowledge that because I think it's really hard. There's a lot of hard work that goes into that with Staff and leadership and Co-Chairs. And it makes it so much more -- so much easier for us to help when there's all that really specific guidance and background. And the analysis that you did of the AAs that you've looked at and all of that really gives us material that we can dig into and be more useful.

And so I just wanted to say that I appreciate how much work that was on so many people's part, and that it really helps.

PANEL CO-CHAIR FONG: Thank you very much.

Yeah, let me just also add my thanks to the staff. And when we were planning the agenda, one of the things I -- coming from Apple, I'm always pushing to be as ambitious as possible. And when Anne Cooper and Meredith, they actually showed me the agenda, I said, well, this is way too ambitious. However, they pulled it off.

And thank you very much to the Panel for your insight and for your energy.

If there are no other comments, meeting adjourned

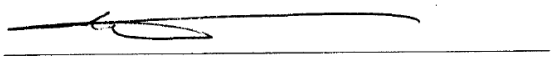
(Thereupon, the Meeting was adjourned at 12:19 p.m.)

REPORTER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 2nd day of October, 2018.



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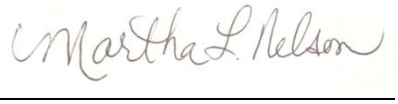

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October 9, 2018